Southwest Texas State University
San Marcos, Texas

The American Medical Association.
Medical Technology.
Medical Record Administration.
Respiratory Therapy.
National Association of Schools of Music.
The American Association of Colleges for Teacher Education.
The American Chemical Society.
The Association of State Colleges and Universities.
The Association of Texas Colleges and Universities.
The Association of Texas Graduate Schools.
The Council of Graduate Schools in the United States.
The National Council for Accreditation of Teacher Education.
The Southern Association of Colleges and Schools.
The Council on Social Work Education.

SEVENTY-EIGHTH ANNUAL CATALOG
1980-1982

This section of Southwest Texas State University's 1980-1982 catalog includes all pertinent information relating to degree requirements and course offerings at Southwest Texas State University.

Each semester's class schedule is available at registration in printed form.

Additional academic information is available from the Office of the Vice President for Academic Affairs, the Office of the School Deans, and in most of the academic departmental offices.

While this catalog was prepared on the basis of the best information available at the time, all information, including statements of fees, course offerings, and admission and graduation requirements, is subject to change without notice or obligation.

Undergraduate Bulletin (USPS 075-160)
Southwest Texas State University
San Marcos, Texas 78666
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Southwest Texas State University is an affirmative action, equal opportunity educational institution. It is not the University's policy to discriminate on the basis of race, color, religion, sex, national origin, age, handicap, or status as a disabled or Vietnam era veteran in the recruitment and admission of students, the recruitment and employment of faculty and staff, and the operation of any of its programs and activities.
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Texas State University System

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Louis C. Moloney, D.L.S .................................... Librarian and Director of Learning
Resources Center
Official University Calendar, 1980-1981

Fall Semester 1980
August 22, Friday .................................................. New faculty orientation
August 25, Monday .................................................. Holiday, honoring LBJ's birthday
August 26, Tuesday .................................................. Orientation for all new transfer and freshmen students not registered
8:15 - 9:45 a.m. .................................................. General Faculty Meeting
2:30 - 3:30 p.m. .................................................. School meetings as needed
3:30 - 4:30 p.m. .................................................. Department meetings as needed
6:30 - 8:00 p.m. .................................................. Registration for evening and Saturday classes only
August 27, 28, and 29—Wednesday, Thursday, and Friday .................................................. Registration
August 27-September 26 .................................................. Dates to file applications for degrees to be conferred on December 20, 1980
September 1, Monday .................................................. Classes begin. Late registration, NO adding/dropping courses
September 2, Tuesday .................................................. Late registration, and adding/dropping courses
September 3, 4 - Wednesday and Thursday .................................................. Official Twelfth Class Day
September 15, Monday .................................................. Official University Calendar, 1980-1981
October 3, Friday .................................................. Last day to complete drop procedure with an automatic grade of “W”
October 22, Wednesday .................................................. Mid-semester
November 27-29, Thursday, Friday, and Saturday .................................................. Thanksgiving holidays
(Classes will be dismissed on Wednesday, November 26, at 9:00 p.m.)
December 1, Monday .................................................. Last day to complete drop procedure or withdraw from the University
December 10, 11—Wednesday and Thursday (Classes meet) .................................................. Final examinations for special classes
December 12, Friday, 8:00 a.m. .................................................. Examinations begin
December 12-17, Friday-Wednesday (Including Saturday) .................................................. Final examinations
December 20, Saturday .................................................. Graduation

Spring Semester 1981
January 13, Tuesday .................................................. Orientation for all new students
6:30 - 8:00 p.m. .................................................. Registration for evening and Saturday classes only
January 14, 15, and 16—Wednesday, Thursday, and Friday .................................................. Registration
January 14-February 13 .................................................. Dates to file applications for degrees to be conferred on May 16, 1981
January 19, Monday .................................................. Classes begin. Late registration, NO adding/dropping courses
January 20, 21—Tuesday and Wednesday .................................................. Late registration and adding/dropping courses
January 31, Saturday .................................................. Official Twelfth Class Day
February 20, Friday .................................................. Last day to complete drop procedure with an automatic grade of “W”
March 11, Wednesday .................................................. Mid-semester
March 16-21, Monday-Saturday .................................................. Spring Vacation
April 29, Wednesday .................................................. Last day to complete drop procedure or withdraw from the University
May 4, 5—Monday and Tuesday (Classes meet) .................................................. Final examinations for special classes
May 6-12, Wednesday-Tuesday (Including Saturday) .................................................. Final examinations
May 16, Saturday .................................................. Graduation

Summer 1981
First Term
May 29, Friday .................................................. Orientation for all new students
May 29, Friday .................................................. Registration
May 29-June 19 .................................................. Dates to file applications for degrees to be conferred on August 15, 1981
June 1, Monday .................................................. Classes begin
June 2, Tuesday .................................................. Only day to register late and to add/drop courses
June 4, Thursday .................................................. Official Fourth Class Day
Official University Calendar, 1981-1982

**Fall Semester 1981**

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<tr>
<td>August 21, Friday</td>
<td>New faculty orientation</td>
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<tr>
<td>August 24, Monday</td>
<td>Holiday, honoring LBJ's birthday</td>
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<td>August 25, Tuesday</td>
<td>Orientation for all new students</td>
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<td>8:15 - 9:45 a.m.</td>
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<tr>
<td>6:30 - 8:00 p.m.</td>
<td>Registration for evening and Saturday classes only</td>
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<td>December 9, 10</td>
<td>Final examinations for special classes</td>
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<tr>
<td>December 11-16</td>
<td>December 19, Saturday</td>
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**Spring Semester 1982**

<table>
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<td>Orientation for all new students</td>
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<td>Registration for evening and Saturday classes only</td>
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<tr>
<td>January 16</td>
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</tbody>
</table>
January 13-February 12  .  Dates to file applications for degrees to be conferred on May 15, 1982
January 18, Monday  .  Classes begin. Late registration, NO adding/dropping courses
January 19-20, Tuesday and Wednesday  .  Late registration and adding/dropping courses
January 30, Saturday  .  Official Twelfth Class Day
February 19, Friday  .  Last day to complete drop procedure with an automatic grade of “W”
March 10, Wednesday  .  Mid-semester
March 13-20, Monday-Saturday  .  Spring Vacation
April 28, Wednesday  .  Last day to complete drop procedure or withdraw from the University
May 3, 4—Monday, Tuesday (Classes meet)  .  Final examinations for special classes
May 5-11, Wednesday-Tuesday (Including Saturday)  .  Final examinations
May 15, Saturday  .  Graduation

Summer 1982
First Term
May 28, Friday  .  Orientation for all new students
May 28, Friday  .  Registration
May 28-June 18  .  Dates to file applications for degrees to be conferred on August 14, 1982
May 31, Monday  .  Classes begin
June 1, Tuesday  .  Only day to register late and to add/drop courses
June 3, Thursday  .  Official Fourth Class Day
June 11, Friday  .  Last day to complete drop procedure with an automatic grade of “W”
June 16, Wednesday  .  Half-term (three weeks) classes—final examinations
June 25, Friday  .  Last day to complete drop procedure or withdraw from the University
June 26, Saturday  .  Classes meet
July 1, Thursday  .  Last day of classes
July 2, Friday  .  Examinations

Second Term
July 6, Tuesday  .  Orientation for all new students
July 6, Tuesday  .  Registration
July 7, Wednesday  .  Classes begin
July 8, Thursday  .  Only day to register late and to add/drop courses
July 12, Monday  .  Official Fourth Class Day
July 21, Wednesday  .  Last day to complete drop procedure with an automatic grade of “W”
July 23, Friday  .  Half-term (three weeks) classes—final examinations
August 3, Tuesday  .  Last day to complete drop procedure or withdraw from the University
August 10, Tuesday  .  Last day of classes
August 11, Wednesday  .  Examinations
August 14, Saturday  .  Graduation
August 20, Friday  .  New faculty orientation
August 23, Monday  .  Holiday, honoring LBJ’s birthday
August 24, Tuesday  .  General Faculty Meeting
Southwest Texas State University

History

Southwest Texas State University, which began its first session in September of 1903, was established in 1899 by the Twenty-Sixth Legislature of Texas as "Southwest Texas State Normal School."

Since its founding, the University has experienced strong, steady growth, paced by legislative action that has changed its name and widened its scope.

In 1923, the school became "Southwest Texas State Teachers College." In 1959, the word, "Teachers," was dropped from its title. Finally, in 1969, thanks to the Sixty-First Texas Legislature, the school became "Southwest Texas State University," acknowledging the fact that Southwest Texas State had become a first-class regional, state, and national institution of higher learning.

One reason for the school's growth in numbers served and in stature has been the effective leadership provided by a succession of presidents.

The first was T. G. Harris, formerly superintendent of Austin schools, who was elected by the State Board of Education to the Southwest Texas State post. He served until 1911, when he was succeeded by a man who was to serve as Southwest Texas State president for 31 years, Dr. C. E. Evans.

Dr. Evans was a school administrator and educational campaign worker before he became president of Southwest Texas State, a position he held continuously until his retirement in September of 1942. He was replaced by Dr. J. G. Flowers, former president of State Teachers College, Lock Haven, Pennsylvania, a former Southwest Texas State student, graduate of East Texas State University, and former Director of Teacher Training at that institution.

After Dr. Flowers' retirement in August, 1964, Dr. James H. McCrocklin became the fourth president. Dr. McCrocklin resigned in April of 1969, and Dr. Leland E. Derrick, assumed the position of acting president until September of that year, when Dr. Billy Mac Jones, Chairman of the Department of History at Angelo State University, assumed the presidency. Upon the resignation of Dr. Jones in August, 1973, Jerome C. Cates, Vice President for Fiscal Affairs, became interim president.

Then, on July 15, 1974, Dr. Lee H. Smith, Vice President for Academic Affairs at the University of Texas at Dallas, became the sixth president of Southwest Texas State University. Under Dr. Smith's guidance, Southwest Texas State University continues to grow and expand.

A local board of three trustees appointed by and under the direction of the State Board of Education was originally responsible for the management of the school. The Board was replaced in 1911 by the Board of Normal School Regents, which was created by the Thirty-Second Legislature and given complete control over the normal schools of Texas.

Board personnel and length of tenure were standardized when the Forty-First Legislature in 1929 enacted a law setting a number of regents at nine.

The Sixty-Fourth Legislature created the Texas State University System in 1975. Today, the Board of Regents, Texas State University System, governs Southwest Texas State University and three sister institutions — Angelo State University, Sam Houston State University, and Sul Ross State University.

University Mission

The mission of Southwest Texas State University, as one of the state-supported public universities in Texas, is to pursue excellence in the teaching/learning development process.
We offer undergraduate and graduate courses, primarily for the people of the State of Texas. As we continue to develop programs of sufficient distinction to merit national recognition, we shall preserve our commitment to excellence in teaching at all levels.

As a teaching institution, we will

- Provide the opportunity for a sound liberal education for all of our students.
- Prepare students for careers through specialized programs of high quality in academic, professional, and technical fields.
- Continue our dedication to a strong teacher education program.
- Insure that all students may work and study with the University's most accomplished teachers at all levels of the educational program.
- Search continually for, and implement where feasible, the best teaching-learning methodologies, be they innovative or traditional.
- Engage in interdisciplinary programs and activities while maintaining the rigor and integrity of the underlying disciplines.
- Maintain high standards for admission and academic performance.
- Provide a suitable educational setting which is attractive, convenient, safe, and academically stimulating.
- Modify our educational programs when necessary to insure the excellence to which we aspire.

As a community of scholars, we pledge ourselves to

- Create, preserve, and transmit knowledge.
- Establish an atmosphere conducive to the dispassionate search for truth.
- Maintain by model and precept high standards of scholarship and research.
- Protect the academic freedom of the University community.

As an institution dedicated to the development of the individual, we will

- Provide the members of the University community with life-long opportunities for growth.
- Provide our students with opportunities for social interaction, enabling them to grow as responsible human beings and to realize their personal goals.
- Encourage our faculty to realize their full potential as teachers, scholars, and leaders.
- Encourage our staff to realize their personal and professional goals.

As a service organization, we will

- Assume reasonable responsibility for contributing to the quality of life in San Marcos and the surrounding area.
- Provide leadership as an organization in the diverse facets of our society.
- Serve as academic, technical, and cultural resource.

We accept the responsibility for fulfilling this mission with integrity, steadfastness, and imagination, at the lowest reasonable cost to the student and to the State of Texas.
Student Rights, Privileges, and Expectations

Southwest Texas State University believes that the primary purpose of higher education is to promote learning and stimulate inquiry for truth in an atmosphere of freedom. Accordingly, the University recognizes, respects and encourages students to exercise the rights and privileges of citizenship. However, these freedoms are not absolute, but are subject to reasonable limitations necessary for the orderly operation of the University's educational processes. The University expects its students to recognize and accept their responsibilities as citizens and members of a scholarly community. Paramount among these responsibilities are respect for the rights of others, academic and personal integrity, and adherence to federal, state and local law.

The faculty and administration are genuinely concerned with the physical and ethical welfare and academic training of students at the University. To that end, the University has established rules of conduct and has published these standards in the form of a Code of Student Conduct contained in the student handbook, Hill Hints. These regulations serve as guides for the attainment of personal and academic goals as well as guides for the orderly functioning of the University. Since students voluntarily associate themselves with the University, they should be aware that these rules are honestly and faithfully enforced.

The administration and faculty encourage student participation in the management of the University through its system of advisory councils and committees. Students are invited to participate as full voting members of these councils and committees, and they are expected to contribute actively to their success. Students may submit recommendations for changes in policy, not only through this committee structure, but also through the operating letter system or through their own student government organization.
Admissions, Residential Living, Financial Assistance

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Admissions

Prospective students are encouraged to visit the Southwest Texas State University campus in San Marcos, and experience first hand the areas of the University which provide special interest to them. While here you can talk with academic personnel in your proposed major, meet a coach or activity coordinator, and visit any of the staff who work to make Southwest Texas State University your University. Campus visits are arranged through the Office of Admissions and School Relations. Call or write the office a few days in advance to arrange your visit to Southwest Texas State University.

High school juniors and seniors may visit during one of our “College Days.” These programs, offered several times a year, provide a one-day introduction to the academics, activities, and facilities. Announcements of the dates are sent to high school counselors and students prior to the event.

Office of Admissions and School Relations
Southwest Texas State University
San Marcos, Texas 78666
Telephone: (512) 245-2364
Office hours: Monday-Friday, 8:00 a.m. to 5:00 p.m.
Summer hours: 7:30 a.m. to 4:30 p.m.
Debbie Evans, Acting Director of Admissions
Lissa Morgan, Freshman Admissions Counselor
Martha St. Clair, Transfer Admissions Counselor
Scott E. King, Admissions Counselor

Policies

The Admissions programs and policies of Southwest Texas State University are designed to admit and enroll those prospective students who will become graduates of the institution. The regular admissions programs, under which 90% of all students are accepted, recognize academic achievement and the ability to be successful within a university atmosphere. Special programs also exist for the non-traditional applicant — a person who has served in the military, an older student who has worked for several years prior to entering Southwest Texas State University, or an advanced high school student who wishes to earn college credits before the completion of his or her secondary education.

You should follow the general procedures, which are outlined below. Specific requirements for each admissions program follow:

General Procedures for Undergraduate Admission:
1. Complete an application for admission (available in the Prospectus, catalog, and from the Office of Admissions).
2. Submit all required credentials.
3. Return the housing reservation/exemption form which you will be sent. You will receive this form only after you are determined to be academically eligible for admission.

Eligibility to enroll for classes is dependent upon fulfillment of academic and University housing requirements. If you do not meet both requirements, you will not be eligible to register for classes.

Medical immunizations are required only of students who have not been enrolled in a Texas high school or college since September, 1972. No other medical history is required for admission although filing a medical report can usually facilitate medical treatment.
**Deadlines.** Prospective students are encouraged to submit all their credentials as early as possible. Students who require on-campus housing to finalize their admission must apply early in order to obtain such housing. The deadlines below apply only to processing of academic credentials and do not imply availability of housing. **ON-CAMPUS HOUSING IS NOT LIKELY TO BE AVAILABLE AT OR IMMEDIATELY PRIOR TO THESE DEADLINE DATES. ADMISSIONS AND HOUSING REQUIREMENTS MUST BE MET BEFORE A STUDENT MAY REGISTER FOR CLASSES.**

<table>
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<tr>
<th>Semester or term</th>
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<tr>
<td>Fall</td>
<td>July 19th</td>
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<td>Spring</td>
<td>December 10th</td>
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<td>Summer I</td>
<td>April 22nd</td>
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<tr>
<td>Summer II</td>
<td>June 17th</td>
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</table>

These deadlines are suggested dates only. Applications submitted after the deadline date will be processed, but applicants should expect some delays in registering. All students applying for a probationary or conditional admission, or as an international student, should insure that all credentials are completed by the above dates.

**New Student Orientation.** Prior to the beginning of each semester an orientation program is held for incoming students. This gives new students the opportunity to receive information on student services, academic advisement, class scheduling and registration instruction, and a chance to become familiar with their new surroundings.

In addition to the standard orientation sessions held prior to each registration period, freshmen entering for the first time during either the summer or fall terms are eligible to participate in one of several two-day summer orientation sessions. Summer Orientation, which is offered from mid-July to early August, includes academic advisement, an introduction to campus life, and early registration for the participants. A separate Parent Program is included in Summer Orientation activities.

All new students receive orientation information once they have met admissions and housing requirements.

**Regular Admissions**

**Freshman and Transfer**

Applicants for admission who are entering directly from high school, or who have completed 11 or fewer computable, transferable, semester hours of credit, are considered for admission as freshman students. All other applicants are admitted as transfer students. Requirements for regular admission follow:

1. All applicants must complete an application for admission.
2. A student entering directly from high school or with 11 or fewer computable, transferable hours of college level credit must submit the American College Test. To sign up for the ACT, contact your high school counselor. Regular admission requires a minimum composite score of 15 on the ACT. A combined score of 750 on the Scholastic Aptitude Test (SAT) will be accepted for admission upon an individual’s written request; however, the ACT examination is preferred and should be attempted if at all possible.

Freshman applicants who do not obtain the required test scores but who have attempted the ACT and have maintained high grades in a high school college preparatory program should contact Freshman Admissions personnel for further options.
3. Official transcripts from each college or university attended must be sent to Southwest Texas State University. An over-all grade-point average of 2.0 (on the 4.0 scale) is required. Waiver forms which report expected grades may be used for work-in-progress or yet to be attempted. In computing the grade-point average, the last grade recorded in repeated courses will be used with the grades of “W,” “Q,” and “WP” disregarded, and grades of “I” and “WF” averaged as “F’s.” (Grades for summer work attempted immediately prior to a fall enrollment will be used only when a student requests their use to establish academic eligibility.)

4. The student must not be on suspension and must be able to return to every college or university previously attended.

5. Freshman applicants (students entering directly from high school or with 11 or fewer computable, transferable, semester hours of credit) must provide an official high school transcript, sent after graduation, which shows graduation from an accredited high school. (A waiver form may be used for summer sessions attended immediately following high school graduation.)

Housing applications will be sent upon receipt of entrance examination scores (if required), college-level transcripts, and waiver forms which demonstrate academic eligibility. A student is eligible to register for classes only when all academic and housing requirements are met.

**Summer Conditional.** This program is designed for freshman applicants not eligible under other admissions programs. The student attends both summer sessions at Southwest Texas State University, attempts and passes 12 semester hours of course work (six hours/session), and accumulates an approved number of hours in the Student Learning Assistance Center. Completion of this work with an over-all GPA of 2.0 results in regular admission for the fall semester. Interested students should contact the Freshman Admissions desk for application information.

**Transfer Probation.** Transfer applicants who do not have the grade-point average requirement, and who have extenuating circumstances, or who have not been enrolled in a college or university for five or more years, may appeal for probationary admission. The student must complete an approved amount of work in the Student Learning Assistance Center, and must raise his or her over-all grade-point average to a 2.0 or higher. This probationary admission is granted for one semester only, is not renewable, and must be applied for no later than 30 days prior to registration.

**Transient Admissions (Summer Only).** A student working toward a degree at another college or university may attend Southwest Texas State University during the summer sessions as a transient student. The applicant must submit a completed application for admission and list all colleges and universities attended. Upon completion of the summer work, the student may request a transcript for use in the home institution. Credit and grade-points earned as a transient student at Southwest Texas State University will not be used in determining regular eligibility for admission to Southwest Texas State University.

**Former Student Re-admission.** All applicants for former student re-admission must be free of suspension both at Southwest Texas State University and at any other institution attended.

A former student who has attempted 11 or fewer computable, transferable semester hours at another college or university since last enrolling at Southwest Texas State University may request and receive automatic readmission. The student must complete a Former Student Application to register and submit transcripts for all college work attempted since last enrollment at Southwest Texas State University.

A former student who has attempted 12 or more computable, transferable semester hours at another institution since last enrolling at Southwest Texas State University must meet regular transfer admission requirements.
Advanced Standing Examinations (Credit-by-Examination) and Evaluation of Transfer Credit. Students may receive course credit at Southwest Texas State University for Advanced Standing Examinations testing, and from courses attempted at another college or university. Questions regarding the Advanced Standing Examinations (Credit-by-Examination) should be addressed to the Counseling Center. The Transcript Analyst, Office of Admissions, may be contacted concerning transfer credit from other institutions.

Two types of credit-by-examination tests are recognized: The general and subject examinations of the College Level Examination Program (CLEP) and departmental examinations, which are administered locally. Certain credit-by-examination tests are given during Summer Freshman Orientation and during the academic year.

Transcripts from college level institutions are evaluated by the Office of Admissions, and a copy is provided the student to be used in academic advisement. Applicability of transfer work toward a degree from Southwest Texas State University is decided by the chairman of the student’s major department.

In accordance with the standards of the Association of Texas Colleges and Universities, Southwest Texas State University accepts a maximum of 66 semester hours from accredited junior colleges. After acceptance of these 66 hours, and after the student has successfully completed one regular semester’s work in residence at Southwest Texas State University, additional junior college credit to the extent of two courses may be completed and accepted. This requires prior written approval of the dean of the School which administers the student’s major department.

Additional Admissions Programs

Southwest Texas State University has developed several programs which provide admission to the University to those applicants who may not be following the traditional educational sequence. All applicants under these admissions programs should contact the Office of Admissions for specific applications and requirements. Applicants for special admissions should arrange a personal interview with admissions personnel.

Accelerated Achievers Admissions Program (AAAP). High school juniors who exhibit high academic ability may attend Southwest Texas State University for either of the two summer sessions prior to their senior year, and may begin to earn credit toward a degree from Southwest Texas State University before graduating from high school. Requirements for admission include enrollment in a college preparatory program with a “B” or better average, a composite score of 24 or more on the ACT* and a recommendation by the student’s high school counselor or principal. (If an applicant has not taken the ACT, but has scored 110 or better on the PSAT calculated by adding the verbal and mathematics scores together, he/she may petition the Freshman Admissions Counselor for acceptance into AAAP.) Course work taken under AAAP is not credited until verification of high school graduation is received.

Early Admission. During the latter part of a student’s senior year in high school, he/she may apply for admission to SWT and take 6 semester hours of courses while completing high school. Requirements for admission are a “B” or better high school average, a composite score of at least 24 on the ACT*, and a recommendation by the student’s high school counselor or principal. Courses taken cannot be credited until verification of high school graduation is received.

Veterans. Applicants under this program must supply a DD-214 showing discharge date and provide proof of high school graduation or its equivalent.

*The SAT examination will be considered for admission upon an individual's written request. Required levels for admission are: AAAP and Early Admission — 1100, GED-950; however, the ACT examination is preferred and should be attempted if at all possible.
**General Education Development (GED).** This category is designed for the student who had medical or personal reasons for not completing high school. The applicant must be 18 years of age and his/her high school class must have graduated. The applicant must submit a GED diploma, and have an ACT composite score of 20*.

**Individual Approval.** High school graduates who have been out of school for at least three years should arrange a personal interview with Freshman Admissions personnel and provide an official transcript showing graduation from an accredited high school.

**International Students.** All applicants who do not hold United States citizenship or permanent residence must fulfill international student admissions requirements. Applicants are required to score 550 or higher on the Test of English as a Foreign Language (TOEFL), and deposit with Southwest Texas State University $3,200.00 for the first nine months' educational expenses. Freshman applicants must provide proof of an education equivalent to that of a United States high school graduate. All transfer students must also meet regular transfer admission requirements including a 2.0 grade-point average.

**Auditing Courses.** A student wishing to audit a course must be academically accepted by the Office of Admissions, and must have approval of the department offering the course. Participation in class discussion and examinations is optional with the instructor. Auditors receive no course credit but are expected to attend class regularly.

A student who has taken a course for audit may, with departmental approval, enroll in the course for credit during a subsequent semester or summer session. The student pays regular course fees at registration for all audited courses.

**Correspondence.** Correspondence study provides an alternative method to earn undergraduate credit hours. Students may register and begin work on a course at any time. Grades for Southwest Texas State University correspondence work may not be used to make a student academically eligible to enter or re-enter Southwest Texas State University. The student is considered a special student, and may register only for correspondence courses until such time that he or she applies to the Office of Admissions and meets regular admission requirements.

**For more information, contact:**
Office of Correspondence Study
J.C. Kellam Building
Southwest Texas State University
San Marcos, Texas 78666
Telephone: (512) 245-2322

**Extension.** Extension classes are client-funded courses which are offered both on and off the Southwest Texas State University campus. All courses are from the regular Southwest Texas State University curriculum, and are offered when necessary to meet public demand. Registration for an extension class does not constitute acceptance as a regular student at Southwest Texas University.

Work completed as a special student in extension courses is not used in determining eligibility as a regularly admitted student to the University. Extension work, which is credited toward a degree from Southwest Texas University, must be approved by the appropriate School dean and department chairman.

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*The SAT examination will be considered for admission upon an individual's written request. Required levels for admission are: AAAP and Early Admission—1100, GED-950; however, the ACT examination is preferred and should be attempted if at all possible.*
Information about extension study may be obtained by contacting:
Office of Extension Study
2020 New Education Building
Southwest Texas State University
San Marcos, Texas 78666
Telephone: (512) 245-2129

Continuing Education. Continuing education courses are non-credit hour classes offered in areas such as real estate, speed reading, basic electronics and management. Continuing education classes do not require acceptance through the Office of Admissions, do not apply toward a degree program at SWT and are not considered in application for regular admission.

To obtain further information on continuing education classes, contact:
Office of Continuing Education
University Service Center
Southwest Texas State University
San Marcos, Texas 78666
Telephone: (512) 245-2507

Residential Living

Residential Living means much more than dwelling in a campus hall. Residential Living includes the full range of experiences which accompany being a member of an academic community encircled by a variety of facilities and services. It is participating in the governing of your hall operation and formulation of policies. Residential Living provides in-house counseling by residential assistants and hall directors. Often success at Southwest Texas State University is encouraged by the atmosphere and many other facets of on-campus life.

The University provides a variety of accommodations and living options suited to the various needs of students. Two living-learning centers provide a special environment and programming for students pursuing teacher training and those who are physical education majors or athletes. In the women's cooperative halls, students share housekeeping responsibilities, and prepare their own meals in return for reduced room and board rates. More traditional halls are also available with a variety of sizes and facilities suited for individual needs and desires.

Dining facilities on campus are supplied by the two Jones cafeterias and Commons cafeteria. These facilities offer an all-you-can-eat policy with Jones Jr. providing continuous meal service. Exceptions are College Inn which has its own cafeteria and the two cooperative halls which serve family style. All menu planning and meal service are supervised by a qualified staff to insure well-balanced meals and attractive service.

University Housing Policy. All single, full-time students (12 or more hours — long terms; six or more hours — summer terms) who have completed fewer than 60 semester hours and who are not living at home must live in University housing and purchase a meal ticket unless granted permission by the Residential Living Office to live off-campus.

Eligibility to Live Off Campus. All students who receive a housing reservation/exemption card must return the card to finalize their admission. This requirement must be fulfilled even if you apply for an "automatic" exemption.

You qualify automatically for an off-campus permit if:
• You have 60 or more semester hours of credit before you register for the semester.
• You are married before you register for the semester.
• You are living at home with your parents.
• You are a part-time student.
You must apply for an off-campus permit if:

- YOU REQUEST TO LIVE WITH A RELATIVE. You may receive a permit to live with a brother, sister, aunt, uncle or grandparent. No other relatives qualify.
- YOU REQUEST TO WORK FOR ROOM AND/OR BOARD. Your employer will be required to certify that you receive all of your room and/or board at the place of employment as compensation for services.
- YOU REQUEST AS A VETERAN. Your request will be granted if you are attending SWT on the GI program.
- YOU REQUEST TO LIVE IN AN OWNED HOME OR MOBILE HOME. You will need to provide proof of ownership.
- YOU REQUEST A MEDICAL EXEMPTION. You will be required to furnish an informative statement from your physician.
- YOU ARE 21 YEARS OF AGE OR OLDER.

When the University is no longer able to accommodate students, sophomores (students with 30-59 hours) may be granted off-campus permits.

Students requesting permits to live off-campus should obtain permission from the Residential Living Office before making any arrangements.

Satisfying Your Housing Requirements. Your academic eligibility must be certified by the Office of Admissions before you may apply for on-campus housing or request an off-campus permit. All single students who have completed fewer than 60 semester hours will receive a housing reservation/exemption card once the Office of Admissions has determined them to be academically eligible. This card must be returned whether you intend to reside on campus or not. Final acceptance to the University, and the right to register for classes, is dependent upon satisfying requirements regarding housing in addition to all academic requirements.

The steps you should take to satisfy your housing requirements are:

1. Make application for admission to the Office of Admissions and supply the required credentials. You will be sent a housing reservation/exemption card once the Office of Admissions certifies your academic eligibility.
2. If you desire housing, complete side A of the card and return it with a $50 deposit to the Office of Residential Living.
   If you wish to apply for an exemption, complete side B of the card indicating the exemption for which you qualify and return the card to the Office of Residential Living.

Cancellation Dates. If you change your plans and will not be attending Southwest Texas State University, you must let the Office of Residential Living know by the appropriate deadline date. Failure to cancel will result in forfeiture of your $50.00 deposit.

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>July 1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Semester</td>
<td>December 1st</td>
</tr>
<tr>
<td>Summer I</td>
<td>May 15th</td>
</tr>
<tr>
<td>Summer II</td>
<td>July 1st</td>
</tr>
</tbody>
</table>

What to Bring. Bring bed linens (for 39” beds), a pillow, bedspreads, towels, blankets, etc. Each hall has coin-operated laundry facilities, drying lines for small items, irons and ironing boards. Please bring only necessities since closet and storage space is limited.

Electrical appliances used in preparing food are not permitted in students’ rooms. Radios, record players, portable television sets, fans, and portable hair dryers are permitted. Air conditioners are not allowed. Refrigerators are available for rental from the Office of the Director of Auxiliary Services.
Financial Assistance

Access to a post-secondary education is no longer limited by the ability of a student and/or parent to provide for necessary educational expenses. Southwest Texas State University participates in a variety of federal, state, and local financial aids programs which may assist if you do not otherwise have sufficient funds available to defray educational costs. The accompanying chart lists filing deadlines for applications, programs the University has available, eligibility requirements for each program and procedures to follow in applying for specific programs. Although Southwest Texas State University prefers the American College Testing Service (ACT) Family Financial Statement, the College Scholarship Service Financial Aid form will be accepted. Applications for either may be obtained from high school counselors or the Southwest Texas State University's Office of Financial Assistance.

Parents and students should use up-to-date tax information to complete the forms (i.e., for Fall 1980 use the 1979 income tax return). Financial need equals the difference between the total costs of attending Southwest Texas State University (including tuition, fees, books, supplies, room, board, transportation, personal expenses) and the ability of the family to contribute toward those educational costs. Factors taken into consideration when evaluating the expected family contribution include parental income and assets, assistance such as social security or veteran's benefits, awards from outside agencies, scholarships, and the student's assets and expected savings from a summer job.

A copy of the parent's IRS Form 1040 or 1040A for the calendar year 1979 will be required for all dependent students applying for need based aid. A copy of the student's IRS Form 1040 or 1040A for calendar year 1979 will be required for all self-supporting students applying for need based aid.

Once documented need is established, the Office of Financial Assistance will make every effort to meet this need. It is impractical for an applicant to limit his/her request to one type of aid such as scholarships and grants, as the financial aid award will be packaged from a variety of sources and will be based on the financial needs and program eligibility of the student and the availability of funds. In some instances, due to fund limitations, an extremely large student budget, program eligibility requirements, etc., the total award may be less than the documented need.

To be eligible for financial assistance, a student must be enrolled at least half time in a degree-granting course of study, in good standing and making satisfactory academic progress, and not in default or delinquent on any loan plan with the University, State, or Federal Government. He or she must not owe a refund on grants previously received for attendance at Southwest Texas State University under the Basic Educational Opportunity Grant, the Supplemental Education Opportunity Grant or the State Student Incentive Grant Program.

Loan programs such as the Federally Insured Student Loan are available when a student is not otherwise eligible for financial assistance. Lenders for the FISL include banks, credit unions, savings and loan associations, etc.

Undergraduates are encouraged to apply for the Basic Educational Opportunity Grant (BEOG) which, like most grants and scholarships, is a gift never to be repaid.

How Financial Aid is Awarded. The Office of Financial Assistance awards aid on the basis of financial need, starting with the highest need factors and awarding aid until funds are depleted. Meeting the application deadline is important as there is a limited amount of aid to be distributed to students and those applications completed by the deadline will be considered first. Should funds be available after the deadline other awards will be made, but those students applying
after the deadline will usually not have funds available at registration to meet college expenses.

The Middle Income Student Assistance Act, signed into law November 1, 1978, substantially increased the number of students eligible to receive financial aid. The new legislation not only increased the average Basic Grant award for previous recipients, but expanded the program to include students from families whose incomes are between $15,000 and $25,000 and many independent students who were previously ineligible.

The legislation also removed the $25,000 income eligibility ceiling on the Federally Insured Student Loan Program thus ensuring that the interest will be paid by the federal government on all such loans while the student is enrolled at least half time in post-secondary education and during the grace period before repayment begins. The student assumes the seven per cent interest rate at the time his/her repayment period begins.

As the result of the formation of the Central Texas Higher Education Authority, Federally Insured Student Loans are now more readily available to students attending Southwest Texas State University. The maximum amount a student may borrow for a 12-month period is the cost of education as determined by the Office of Financial Assistance of the school attended, minus any financial aid provided through the school. Undergraduates may borrow up to $2,500 in a 12-month period with an aggregate maximum of $7,500. Graduate students may borrow up to $5,000 in a 12-month period with an aggregate maximum (including undergraduate loans) of $15,000.

Students receiving financial aid who withdraw from the University will be expected to repay the aid they received in accordance with the following repayment schedule:
1. First week of classes - 95% of aid received
2. Second week of classes - 90% of aid received
3. Third and fourth week of classes - 80% of aid received
4. Fifth and sixth week of classes - 70% of aid received
5. Seventh and eighth week of classes - 60% of aid received
6. Ninth and tenth week of classes - 50% of aid received
7. Eleventh week to end of semester - 0% of aid received

Funds from all programs disbursed by the Office of Financial Assistance will not be available until the regular registration period which is indicated in the official University calendar in the catalog. Funds are disbursed one-half each semester. Students who have been approved for financial aid and who have accepted this aid by signing an award letter will be given credit during registration up to the cost of attendance. If a student's aid exceeds actual costs, a check will be prepared at a later date, usually within one to two weeks. If the aid does not cover actual costs, the student must be prepared to pay the difference from his/her own resources. This credit system applies to all financial aid programs except the Federally Insured Student Loan, the Hinson-Hazelwood College Student Loan, the Texas Public Educational-State Student Incentive Grant, outside scholarships, and aid over which the University has no control.

It is the responsibility of the student to inform the Financial Assistance Office of any resources available to the student to be used in meeting college expenses. Such resources include a job, scholarships or gifts that a student would receive after aid had been awarded. For example, if a student shows a financial need of $2,000 computed from the needs analysis, the Office of Financial Assistance would award $2,000. After accepting the aid, if the student finds out that a $500 scholarship has been awarded from his hometown, the aid would be reduced to $1,500. If the student had received his full aid ($2,000), then he/she would have to repay to the aid programs the amount that was over the financial need.
It is the responsibility of the student to comply with proper withdrawal procedures of the University so that any financial obligations may be taken care of before he/she leaves the University. A student on the National Direct Student Loan or Hinson-Hazelwood College Student Loan programs must execute an exit interview and follow a schedule of repayments, set up by the loan officer.

A student may not receive an official transcript or be allowed to register if: (1) he/she is delinquent on a loan program, (2) he/she owes money to a program which was considered to be an overaward, or (3) through withdrawal, the student was required to re-pay a program.

A student may not earn more than the amount designated in the award letter. Work-study is a federal program and a student may not earn more than the limit designated for him/her. If a student earns more than the designated amount, he/she would be required to repay the loan programs first, and then the other applicable programs.

Students obtaining aid from federally and state funded programs must be making satisfactory academic progress toward a degree program. For purposes of awarding financial assistance only, satisfactory academic progress will be determined after a student has been enrolled for two semesters at Southwest Texas State University and every semester thereafter. An undergraduate student is considered to be making satisfactory academic progress if the following conditions are met:
1. a minimum overall GPA of 2.0 is maintained on all college work, including transfer credit; and
2. a minimum of six semester credit hours per semester and an average of twelve semester credit hours over all semesters enrolled at Southwest Texas State University are satisfactorily completed.
3. no academic conditions are applied to the student's admission or readmission.

Upon appeal to the Financial Assistance and Scholarship Committee, through the Director of Student Financial Aid, any of the above conditions may be waived for the purposes of awarding financial assistance.

**Student Retention.** The number of students who received bachelor's degrees from Southwest Texas State University in 1978, was more than half (50.96%) the number of freshmen enrolled four years earlier. Most students who leave Southwest Texas State University without a degree withdraw during or immediately after the freshman year. Of the freshman class which entered in the Fall of 1977, 40 per cent did not return the following Fall Semester.

<table>
<thead>
<tr>
<th>Estimated 1980-81 Budget</th>
<th>Resident</th>
<th>Commuter</th>
<th>Married</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and fees</td>
<td>$440</td>
<td>$440</td>
<td>$440</td>
</tr>
<tr>
<td>Room and board</td>
<td>1,550</td>
<td>750</td>
<td>3,240</td>
</tr>
<tr>
<td>Books and supplies</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Personal expenses</td>
<td>500</td>
<td>440</td>
<td>*1,000</td>
</tr>
<tr>
<td>Transportation</td>
<td>360</td>
<td>720</td>
<td>570</td>
</tr>
<tr>
<td></td>
<td><strong>$3,100</strong></td>
<td><strong>$2,600</strong></td>
<td><strong>$5,500</strong></td>
</tr>
</tbody>
</table>

*Add $750 for each dependent child.

OUT-OF-STATE: Tuition and fees—$1,476
Resident total—$4,136

**Employment.** The College Work-Study Program is one of the federal campus-based aid programs available. The Work-Study Program provides jobs for students who have documented financial need and who wish to earn part of their educational expenses while they are going to school. Jobs average from 15 to 19 hours per week, and range from clerical worker to research assistant. In general,
work hours are flexible enough to fit students' academic schedules. Students working in the College Work-Study Program should be aware that they are paid on a monthly basis with the first paycheck available after the student has worked for approximately one month. If awarded work-study, students must first report to the Office of Student Financial Aid for interview and job placement. College Work-Study students are not eligible for fringe benefits such as holiday, vacation, or sick pay and are paid on the basis of "an hour's work for an hour's pay."

Regular student part-time employment is available to students who have a need and wish to work, but do not qualify for college work-study or who have not requested or been granted other financial assistance through the Office of Financial Aids. The Office of Financial Aids accepts these applications, and will attempt to match students with available jobs.

Appeal Procedure. Students may appeal decisions made concerning their initial and continuing eligibility for financial assistance through the following appeal mechanism:

1. The Student Financial Aid Counselor
2. The Director of the Office of Student Financial Aid
3. The Dean of Student and Academic Services
4. The University Financial Assistance and Scholarship Committee.

Decisions of the committee may be reviewed by the Vice President for University Affairs.

Loan Payment Information. The long-term educational loans available through the Office of Financial Assistance have many repayment benefits of which the prospective borrower should be aware. All of the loans defer payment while the borrower is enrolled in a course of study at least half-time. Re-payment is made on a monthly basis over a period not exceeding ten (10) years.

The following sample repayment tables demonstrate the re-payment associated with varying total dollar amounts of obligation. Please note that the monthly payments represent approximate amounts only.

<table>
<thead>
<tr>
<th>Amount Borrowed</th>
<th>No. Months</th>
<th>7% Minimum Payment</th>
<th>No. Months</th>
<th>3% Minimum Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>$500</td>
<td>18</td>
<td>$30/mo.</td>
<td>18</td>
<td>$30/mo.</td>
</tr>
<tr>
<td>1000</td>
<td>36</td>
<td>31/mo.</td>
<td>35</td>
<td>30/mo.</td>
</tr>
<tr>
<td>2500</td>
<td>108</td>
<td>32/mo.</td>
<td>94</td>
<td>30/mo.</td>
</tr>
<tr>
<td>3500</td>
<td>120</td>
<td>41/mo.</td>
<td>120</td>
<td>34/mo.</td>
</tr>
<tr>
<td>5000</td>
<td>120</td>
<td>58/mo.</td>
<td>120</td>
<td>49/mo.</td>
</tr>
</tbody>
</table>

Deferral of re-payment of principal and interest is available for advanced study, military, and certain volunteer commitments. All terms and conditions are provided to the student in advance of executing the promissory note.

Deadlines: Fall — May 1
Spring — October 15
Summer — March 15

Applications completed after the deadlines stated above will be considered for aid if funds are available.

Information Center. The Director of Student Financial Aid and members of the staff may be contacted by calling (512) 245-2315 or visiting the office located in the J.C. Kellam Building, Room 235. Office hours are Monday through Friday, 8:00 a.m. to 5:00 p.m. Financial aid counselors are available to talk with students and parents between the hours of 10-12 and 1-3 weekdays.

Student's Rights and Responsibilities:

You have the right to know...

• what financial programs are available at your school.
• the deadline for submitting applications for each of the programs.
• how financial aid will be distributed, how decisions on distribution are made, and the basis for these decisions.
• how your financial need was determined. (Costs for tuition and fees, room and board, travel, books and supplies, personal, and miscellaneous expenses are considered in your budget.)
• what resources (your current assets, parental contribution, other financial aid, etc.) were considered in the calculation of your need.
• how much of your financial need as determined by the institution has been met.
• the details of the various programs in your student aid package.
• your school's refund policy.
• what portion of the financial aid you received must be repaid and what portion is grant aid. If the aid is a loan, you have the right to know the interest rate, the total amount that must be repaid, the payback procedures, the length of time you have to repay the loan, and when repayment is to begin.
• how your school determines if you are making satisfactory progress and what happens if you are not.
• that you may be required to repay all or a portion of aid received if you withdraw or drop below full-time status.

In accepting your responsibilities, you must . . .
• complete all application forms accurately and submit them on time to the proper place.
• provide correct information. In most instances, misreporting information on financial aid application forms is a violation of law and may be considered a criminal offense which could result in indictment under the U.S. Criminal Code.
• return all additional documents, verification, corrections, and/or new information requested by either the financial aid office or the agency to which you submitted the application.
• be responsible for reading and understanding all forms that you are asked to sign and for keeping copies of them.
• live up to all agreements that you sign.
• perform the work agreed on in accepting a college work-study award.
• be aware of and comply with deadlines for application or reapplication for aid.
• be aware of your school's refund procedures.
• report changes in name, address, and telephone number to the proper office.
• know that if you withdraw or drop below full-time status you may be required to repay all or a portion of any aid received according to the policy outlined in the Southwest Texas State University catalog.

Changing Schools. If you transfer from one school to another, your financial aid does not automatically go with you. You must take the necessary action to continue receiving it at the new school. As soon as possible, consult the financial aid officer at the new school to make sure that aid will be available. Also, many schools require transfer students to submit a financial aid transcript from their former school. Ask about requirements at the new school.

If you have a . . .
• Guaranteed Student Loan, check with the lender to make sure you can continue your loan at the new school.
• Basic Grant, you must get a copy of your Student Eligibility Report to submit to the new Financial Aids Office. This report is described in the section of the Family Financial Statement which deals with basic grants.
- National Direct Student Loan, reapply at the new school.
- Supplemental Educational Opportunity Grant, reapply at the new school.
- College Work-Study job, re-apply at the new school.

**Financial Aid Programs**

*Deadline for filing financial assistance application*

- **Fall Semester - May 1**
- **Spring Semester - October 15**
- **Summer Sessions - March 15**

<table>
<thead>
<tr>
<th>Program</th>
<th>Eligibility</th>
<th>Value</th>
<th>How to Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. GRANTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEOG (Basic Educational Opportunity Grant)</td>
<td>Enrolled full-time to receive full grant</td>
<td>Up to one-half of educational cost according to eligibility index</td>
<td>ACT needs analysis will be used for qualifying</td>
</tr>
<tr>
<td>SEOG (Supplemental Educational Opportunity Grant)</td>
<td>Exceptional financial need, enrolled at least half-time</td>
<td>From $200 to $500 per year, must be matched with other aid</td>
<td>ACT needs analysis will be used for awarding</td>
</tr>
<tr>
<td>TPEG (Texas Public Educational Grant)</td>
<td>Financial need, full-time enrollment</td>
<td>$200 to $500</td>
<td>ACT needs analysis will be used for awarding</td>
</tr>
<tr>
<td>SSIG (State Student Incentive Grant)</td>
<td>Financial need, full-time enrollment</td>
<td>Match with Texas Public Educational Grant</td>
<td>ACT needs analysis will be used for awarding</td>
</tr>
<tr>
<td>Law Enforcement Education Program (Grant)</td>
<td>Now employed as a Law Enforcement Officer, other priorities established according to funding level, half-time for grant, must be prior recipient at this or other approved institution transferring to this institution</td>
<td>Tuition and fees, Financial Assistance Office must have receipts for the above before funds are available</td>
<td>Application from the Financial Assistance Office</td>
</tr>
</tbody>
</table>

| **B. LOANS** | | | |
| NDSL (National Direct Student Loan) | Enrolled at least half-time | $1,200 maximum per academic year, not to exceed $5,000 for undergraduate study, the loan is interest free while student is in school, repayment with 3% interest begins 9 months after completion of degree or leaving school, cancellation privileges in certain teaching categories | ACT needs analysis will be used for awarding |
| H-H (Hinson-Hazelwood College Student Loan Program) | Texas residents only, enrolled at least half-time, personal pre-loan counseling is required | $2,500 per year maximum, repayment begins 9 months after completing degree or leaving school with 7% interest charged | ACT needs analysis will be used for awarding |
| Short-term Emergency Loan | CPA 2.0, enrolled at SWT at least one prior semester, no holds on record, must not be on conditional admission, repaid within semester | $20 to $200 | Application from the Financial Assistance Office |
| FISL (Federally Insured Student Loan Program) | Enrolled at least half-time | $2,500 per year | Through your own lending institution |
| FISL (Federally Insured Student Loan Program) through the Central Texas Higher Education Authority (CTHEA) | Enrolled full-time (no less than 12 hours), freshmen applicants must have either graduated in upper 50% of their high school graduating class or score 19 or better on ACT test | $2,500 per year, freshmen not to exceed one-half of educational cost | Application from Financial Assistance Office or participating lender |
C. EMPLOYMENT

Federal College Work/Study Program
Enrolled at least half-time
Limited to an average of less than 20 hours per week or up to the need of the student with all other awarded aid being considered
ACT needs analysis and request from student for need to be funded by working

Student Employment other than Work/Study
Enrolled at least half-time, maintaining acceptable GPA
Limited to an average of less than 20 hours per week
Complete employment application in Student Employment Office

D. SCHOLARSHIPS

Freshman
Awarded on ACT score, high school grades, high school activities enrolled full-time
$150 to $300
Application through Financial Assistance Office, deadline March 15

University Scholars Program
High GPA or ACT scores, high school seniors or junior college graduates are eligible to apply
$1,000 per academic year
Application from Dean of the School of your major, deadline March 15

Presidential Upper-Level Scholarships
Students with 60 hours or more, 30 or more of which earned at SWT
$1,200 for one academic year only
Through Chairman of your major department

Departmental Scholarships
Inquire Department Chairman of your major
Inquire Department Chairman of your major
Inquire Department Chairman of your major

A COPY OF THE PARENTS 1040 FOR DEPENDENT STUDENTS AND THE STUDENT’S 1040 FOR SELF SUPPORTING STUDENTS WILL BE REQUIRED FOR STUDENTS APPLYING FOR FEDERAL AND/OR STATE NEED BASED AID.

ALL STUDENTS APPLYING FOR ANY OF THE ABOVE STATE AND/OR FEDERAL PROGRAMS MUST BE MAKING SATISFACTORY ACADEMIC PROGRESS AS DEFINED IN THE UNIVERSITY CATALOG.

Lyndon Baines Johnson Family Foundation Scholarship Fund

A scholarship program has been made available by the Lyndon Baines Johnson Family Foundation in memory of the late President Lyndon B. Johnson. Two scholarships based on academic ability, high school activities and financial need are awarded annually. Each $1,200 scholarship recipient is selected from students recommended by their high school principal, counselors, or teachers. One scholarship is awarded to a student living in each of the following areas:
1. Llano, San Saba, Mason, Gillespie, Blanco and Burnet counties.
2. LaSalle, Frio, Dimmit, Webb and McMullen counties.

Veterans Benefits. Students who plan to attend SWT while receiving educational assistance under one of the public laws for veterans and/or their dependents should contact the Office of Veteran Affairs (OVA) to complete the required application. Payments are made at the end of each month or fraction thereof in which the student is in school.

Any student enrolling under any of the provisions for VA educational benefits should bring sufficient funds to defray the initial cost of tuition and fees and living expenses for approximately three months. There is usually a delay of eight to ten weeks in receiving the first payment from the Veterans Administration.

After 60 semester hours have been completed the student must supply the OVA with a copy of his/her degree outline. When a student begins his/her last 30 semester hours he/she must supply the OVA with a copy of his/her degree summary.

Graduate students should also consult the latest graduate catalog.

It is the student’s responsibility to notify the OVA of any adds, drops, program changes, etc.
Fees and Expenses

Deposits and Registration Fees

Fees for Special Courses (In addition to Registration Fees) .................................. 25-26
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Fees and Expenses

Deposits and Registration Fees

The University reserves the right to change fees in keeping with the acts of the Texas Legislature and the Board of Regents, Texas State University System.

The payment of all fees entitles the student to admission to classes, admission to auditorium and athletic attractions, subscription to The University Star, use of the Student Center facilities, use of the health services, Sewell Park facilities and group use of the Wimberley Camp. These fees also help provide funds for the Associated Students, band, choir, dramatics, debate and other student activities.

All fees herewith are subject to change.
Please consult the following official fee charts for exact costs in all categories.

Fees for Special Courses
(in addition to registration fees)

Piano, organ, voice, band or orchestral instruments:
Two (one-half hour) lessons per week .......... $ 35.00 per semester
One (one-half hour) lesson per week ........... 18.00 per semester
Class Piano 1108, 1110, 1112, 1114 ........... 10.00 per semester
Music Practice Fee .................................. 2.00 per semester
Scattered Practice Teaching, Education 4382, 4383, 4384 ...... Off-Campus
(payable in full upon initial registration one time only) .......... $75.00

Laboratory Fees:

Agriculture 4300, 4303 ................................ $ 2.00 per semester
Agriculture 2379, 3379, 4302, 4361 ................. 3.00 per semester
Agriculture 3304 ........................................ 4.00 per semester
Agriculture 2373, 2374, 3375, 4374 .................... 5.00 per semester
Agriculture 2345 ........................................ 8.00 per semester

Biology 1410, 1420, 2340, 2350, 2360, 2430, 2440,
3320, 3322, 3360, 3365, 3410, 3440, 3442, 3450,
3470, 3480, 3490, 3495, 4299, 4302, 4303, 4305,
4310, 4313, 4315, 4316, 4320, 4321, 4322, 4323,
4330, 4340, 4345, 4365, 4370, 4380, 4411, 4412,
4440, 4445, 4454 ........................................ 2.00 per semester

Chemistry 1410, 1420, 1430, 2130, 2410, 2420,
2450, 3245, 3410, 4262, 4275, 4299, 4336,
4337, 4412, 4430, 4435, 4440, 4465 (Not Including Breakage) ... 2.00 per semester

Education 4303 ........................................... $ 2.00 per semester

Geology 1414, 1415, 3311, 3316, 4330 ................. 5.00 per semester

Home Economics 1330, 2332, 3336, 3338 ................ 5.00 per semester

Industrial Arts 1320, 1330, 2310, 2320, 2330,
2344, 2350, 2365, 2370, 3310, 3313, 3320,
3350, 3365, 3370, 3380, 3384, 3386, 4310,
4313, 4330, 4350, 4360, 4362, 4371, 4372,
4373, 4374, 4375, 4385, 4387, 4388, 4393 .................. 6.00 per semester

Industrial Arts 1413, 1450, 1632 ......................... 8.00 per semester

Physics 4336, 4337 ....................................... 2.00 per semester
Certificate Fee (payable when applying for certificate)
  Provisional (permanent) ........................................ $2.00
  Professional ................................................................ 3.00
Diploma Fee ...................................................................... 8.00
Diploma Insert Fee (re-application for graduation) .............. 1.00

General Property Deposit. Each student is required to make a General Property Deposit of $10.00 which must remain with the University through his career here except as noted below. All charges for property losses, damages, breakages, or violations of rules of the University must be settled promptly. However, any unpaid current charges will be deducted from the deposit before a refund is made.

Refund of General Property Deposit. The General Property Deposit, less charges, will be returned to the student at the end of his career as a student, provided, however, that any General Property Deposit which remains without call for refund for a period of four years from the date of last attendance at this University shall be forfeited and the deposit become a part of and operative to the permanent use and purpose of the University Student Deposit Fund.

Laundry Service Fees for Physical Education Uniforms: The following fees are required for students enrolled in physical education courses which require uniforms. Students taking more than one uniform-required course will pay only one fee:

$10.00 per long term
5.00 per summer term

Fees for individuals not enrolled in physical education courses who wish to use the University physical education uniforms are as follows:

Students ................................................................. $10.00 per long term
5.00 per summer term

Faculty, staff, or spouse of faculty or staff .......................... 40.00 for twelve months
15.00 per long term
5.00 per summer term

Children of faculty or staff
18 years of age or younger ........................................... 10.00 per long term
5.00 per summer term

Motor Vehicle Registration Fee: Every faculty member, student or employee of the University who operates or parks one or more vehicles on the campus must register each vehicle during registration at the beginning of the fall semester of each year, or as soon as each vehicle is brought on campus, with the Office of Permits and Identification. A registration fee will be charged according to the schedule listed below.

Motor Vehicles, 12 months (Fall, Spring, and Summer) ........... $15.00
Motor Vehicles, Spring and Summer Only ............................. 10.00
Motor Vehicles, Fall Only .................................................. 10.00
Motor Vehicles, Summer Only ............................................. 5.00
Motor Vehicles, Commuter, and Riverside Apartments, 12 months (Fall, Spring, and Summer) ............................................. 5.00
Motor Vehicles, Commuter and Riverside Apartments (Spring and Summer Only) ............................................. 3.00
Motor Vehicles, Commuter and Riverside Apartments (Fall Only) ............................................. 3.00
Motorcycles, 12 months (Fall, Spring, and Summer) ............... 3.00
Motorcycles (Fall Only) ..................................................... 2.00
Motorcycles (Spring and Summer) ........................................ 2.00
Motor Vehicles, Retired Faculty and Staff .............................. 5.00
The refund schedule for an unused registration decal is as follows:

**Fall or Spring Semester**
- Prior to first regularly scheduled class day: 100%
- During first five class days: 80%
- During second five class days: 70%
- During third five class days: 50%
- During fourth five class days: 25%
- After fourth five class days: None

**Summer Session**
- Prior to first regularly scheduled class day: 100%
- During first, second, or third class day: 80%
- During fourth, fifth, or sixth class day: 50%
- Seventh day of class and thereafter: None

### Required Registration Fees for Each Semester — 1980-1981

**Residents of Texas**

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<th>Hours</th>
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*Add $4.00 for tuition for each hour over 20; Student Service Fee, Building Use Fee, Student Center Fee, and Bus Fee remain the same.

### Summer Term—1981

*(per term)*

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*Add $4.00 for tuition for each hour over 7.
**Add $6.00 for Building Use Fee for each hour over 7 (maximum $45.00). Student Service Fee, Student Center Fee, and Bus Fee remain the same.
## NON-RESIDENT STUDENTS
### UNITED STATES CITIZENS
### AND
### FOREIGN STUDENTS

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*Add $40.00 for tuition for each hour over 20; Student Service Fee, Building Use Fee, Student Center Fee, and Bus Fee remain the same.

### Summer Term—1981
#### (per term)

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*Add $40.00 for tuition for each hour over 7.
**Add $6.00 for Building Use Fee for each hour over 7 (maximum $45.00).
Student Service Fee, Student Center Fee, and Bus Fee remain the same.
Residency for Tuition Purposes. The Texas Legislature and the Coordinating Board, Texas College and University System, have established guidelines for determining Texas resident and non-resident classifications and the corresponding tuition rates. Texas residency for tuition purposes is generally obtained by working in Texas for 12 months immediately prior to enrollment in any college or university, or by being a dependent of a Texas resident. Full regulations are available at the Office of Admissions and Registrar.

Any student who has lived outside Texas or who has a possibility of being a non-resident is coded accordingly by the Office of Admissions and Registrar. Upon receipt of a completed residency questionnaire, a determination of eligibility to pay in-state tuition will be finalized.

It is the student's responsibility to insure that the application is properly coded for tuition purposes. Any change in residency status must be reported to the Office of Admissions and Registrar.

Riverside Apartments (Married Student Housing)

Unfurnished except for refrigerator and range. (monthly rate) .... $156.00
Furnished (eight only) ........................................ $172.00
Deposit (Refundable if manager notified at least 30 days before beginning of month for which apartment is reserved) .......... $50.00

The monthly rates for Riverside Apartments include the furnishing of usual utilities. If air conditioners or window fans are installed by students, with consent of the manager, additional monthly charges for utilities will be required. Address all applications to the Manager, Riverside Apartments, San Marcos, Texas 78666.

Room and Board

The room and board rates shown are on a per-student, per semester basis, two students per residence hall room. Rates include state sales tax on meals.

The University makes available for residence hall students two meal plans. Semester meal plans are available on a 15-meals per week (5-day) plan, or on a 20-meals per week (7-day) plan. Residents may choose either one of these two plans, except students residing in the College Inn, where only 20-meals per week (7-day) plan is available, and students residing in the Women's Cooperative Halls.

The 15-meals per week plan is a 5-day plan that provides for meals Monday through Friday only. The 20-meals per week plan is a 7-day plan that provides for meals Monday through Sunday noon. The University Food Service does not provide the evening meal on Sundays.

Room and board are computed on the semester basis and may be paid by the semester or in two equal installments as follows: For the fall semester, the first payment is due and payable on the date of registration, and the other payment is due and payable on or before October 22. For the spring semester the first payment is due and payable on the date of registration, and the other payment is due and payable on or before March 10.

Students not residing in the University residence halls may secure board at the University dining halls at the following rates: 15 meals per week (5-day) plan, $347.50 per semester, or $173.75 per installment; 20-meals per week (7-day) plan, $358.00 per semester, or $179.00 per installment, in accordance with the schedule indicated above, or they may purchase single meals from the University dining halls. Board rates include State sales tax.
### FEES AND EXPENSES

#### The following room and board rates apply:

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</tr>
<tr>
<td>All air-conditioned residence halls except Women’s Residence Tower and College Inn</td>
<td>$393.75</td>
</tr>
<tr>
<td>Women’s Residence Tower</td>
<td>$429.25</td>
</tr>
<tr>
<td>Non-air-conditioned residence halls</td>
<td>$320.25</td>
</tr>
<tr>
<td>College Inn (20-meals per week plan only)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Women’s Cooperative Halls</td>
<td>Not Available</td>
</tr>
<tr>
<td>Students not residing in University residence halls (board only)</td>
<td>$173.75</td>
</tr>
</tbody>
</table>

*Prices include State Sales Tax on meals.

All room and board prices are computed on the basis of a multiple occupancy of rooms. If a student requests and is permitted to have a private room, or two students are permitted to occupy a three-student-capacity room, the room rental charges will be increased $155.75 per installment in the College Inn; $127.75 per installment for the Women’s Residence Tower; $110.00 per installment for other air-conditioned rooms; and $73.25 per installment for other rooms.

The University reserves the right to increase or decrease the room and board rates on 30 day’s notice.

All residence halls will be closed during the Thanksgiving and Spring holidays, as well as between semesters, provided that the University may choose to keep the residence halls open in case the intermission is too short to justify closing.

Refunds: Any student who withdraws officially from the University or who is granted permission to live off the campus may receive a refund on the unexpired portion of the room and board payment for the current installment period, reduced by the amount of $5.00, provided that no refund shall be made in cases where students withdraw from the University or are permitted to live off the campus within ten days of the end of the current installment period. The refund will be computed from the date the approved withdrawal card, the meal ticket, and the student’s room and board receipt are presented to the Cashier in the Office of the Director of Accounting. All payments made for room and board beyond the current installment period may be refunded 100 per cent upon official withdrawal and request.

Room and board charges will continue until the student has officially moved from the University residence halls and cleared with the office of the Director of Residential Living and the Office of the Director of Accounting.

Any refund due will be mailed within approximately 30 days to the address left with the Office of the Director of Accounting.

### Other Fees

**Admission/Evaluation Fee for International Students.** A non-refundable admission/evaluation fee of $25.00 will be charged all international students applying for admission who hold, or will be holding, a non-immigrant visa while in the United States, and who are considered for admission on the basis of foreign credentials.

**Auditing Fee:** Where auditing a course is permitted, all fees will be the same as if the course were taken for credit.
Late Registration. A late registration fee of $10.00 will be charged all students (undergraduates only) who register after the first class day of any semester or either term of a summer session, provided that the Registrar may waive such fee if the late registration is dictated by circumstances deemed by him to be beyond the student's control.

Off-Campus Courses. Off-campus students pay tuition and fees at the same rate as on-campus students.

Payment of Fees. All fees and deposits are payable at the time of registration, and a student is not registered until his fees are paid. Payment may be made in check or money order payable to Southwest Texas State University. If checks are returned unpaid for any reason other than the admitted error of the bank, the student must pay in cash immediately, and a $5.00 service fee will be charged for each returned check. Students whose checks have been dishonored may be required to pay in cash thereafter.

Loose coins in excess of the appropriate denomination required by banks are not acceptable for payment of any fee unless they are wrapped in appropriate denominational coin wrappers and signed by the payer.

Refund of Fees. Any student who has paid his registration fees and officially withdraws by submitting a withdrawal card and registration receipt to the cashier in the Office of the Director of Accounting, 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

*A matriculation fee of $15.00 will be assessed any withdrawals prior to the first day of classes.

**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

** A matriculation fee of $7.50 will be assessed any withdrawals prior to the first day of classes.

Should a student reduce his semester hours by officially dropping a course or courses, the following refund rates will apply, provided the student remains enrolled at Southwest Texas 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

No refunds will be made when the amount is less than $2.00. An immediate refund will not be made at the time a student withdraws or reduces his 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 Window, Office of the Director of Accounting.
Schedule Change. A fee of $2.00 will be charged for each change of schedule of a student after the schedule has been filed, except when such change is dictated by circumstances deemed by the Registrar to be beyond the student's control.

Student's Financial Obligations. Students are expected to meet financial obligations to the University within the designated time allowed. Registration fees are payable at the time of registration, and students are not entitled to enter class, or laboratory, until their fees and deposits have been paid. Other charges are due at registration or within ten days after a bill is rendered by the University, or according to the special payment instructions, that may be printed on the bill. Failure to pay the amount owed in the allotted time, may result in any or all of the following: (1) dismissal from the University, (2) withholding of future registration privileges, (3) withholding the issuance of an official certified transcript, and (4) withholding the conferring of a degree.

Tuition and Fees for Special Summer Course Offerings Other Than the Traditional Six-Week Term. The tuition and fees semester credit hour rate for any course offering of less than six-weeks duration, will be the same as the tuition and fees semester credit hour rate for the traditional six-week term; and, tuition and fees semester credit hour rate for any term of more than six-weeks duration, will be the same as the tuition and fees semester credit hour rate for a regular semester of the school year.

Tuition Limit in Cases of Concurrent Enrollment. To be eligible for the provisions of Senate Bill 250 (students concurrently enrolled at another public institution of higher education), a student must present to the representative of the Director of Accounting at the “Tuition Adjustment Table” on the day he registers, evidence of enrollment, number of semester hours enrolled, and receipt showing total tuition and other fees paid at another public institution of higher education.
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Graduation and Other Academic Requirements

Academic Requirements

Getting Started

Correct Registration. Students are required to use their correct legal name on all registration materials. The University assumes no responsibility for student credits when different names or a variation of names are used by a student during registration.

Privacy Act of 1974. To maintain compliance with the Family Educational Rights and Privacy Act of 1974, the Dean of Student Life will presume that each student is a dependent of his or her parents when dealing with student education records maintained in that office. A student may, however, establish his independence by presenting proof thereof to the Dean of Student Life by the twelfth class day of each semester. The Director of Admissions and Registrar, on the other hand, will presume that each student is independent of his or her parents when dealing with student education records maintained in that office. Dependency may be established by presenting proof thereof to the Director of Admissions and Registrar by the twelfth class day of each semester. Procedures for establishing dependency statuses are available in the Offices of the Dean of Student Life and the Director of Admissions and Registrar.

Academic Counseling. Free, individual consultation is available to each student through the chairman of the student’s major department. The chairman, or his designee, will advise the student on the requirements of the major and help design the student’s academic program to meet those requirements. Academic counseling is encouraged prior to each registration.

Placement and Career Planning. Employment information and services are available to each student through the Office of Placement and Career Planning. A student who has not decided on a major field of study may obtain job market supply and demand data through the office. The office also provides vocational and employment publications from business, industry, and schools. A job placement file will be prepared for any student who requests it. The office assists graduating students and alumni in finding employment, posts notices of job openings, and arranges on-campus interviews for representatives of businesses, industrial concerns, government agencies, school districts, and the military.

Advanced Standing Examinations (Credit-by-Examination). A student may earn credit for some courses by taking and passing one of two types of examinations prior to enrolling in the course, or taking upper level courses in the same subject area. Southwest Texas State University administers the College Level Examination Program tests for the same fee that the University pays to the Education Testing Service. Departmental advanced standing examinations may be taken for $10.00 per test. Detailed information on both types of examinations is available through the Counseling Center.

Semester’s Work Load. The average load for an undergraduate student is 15-17 semester hours, for which a “C” average is required. A student may register for 18 semester hours if he is taking only five courses. The “B” average permits 18-19 semester hours; whereas, a graduating senior may do the same. Twenty to 22 semester hours are permissible for a student of proved unusual academic ability in all disciplines. All of the above limits are exclusive of physical education activity.
Summer Session Work Load. The usual summer load is six semester hours for one term, or 12 semester hours for two terms, exclusive of physical education activity. The maximum load for a graduating senior, or for a “B” average (over-all) undergraduate, or post graduate student, is 16 semester hours for both six-week terms.

The maximum load for one summer term for all undergraduates, or post graduates, is eight semester hours. Exceptions are graduating seniors, “B” average (over-all) undergraduates, or post graduates who enroll for ten semester hours.

No student may exceed the usual load without permission of his department head. Under no conditions may any student enroll for more than 16 semester hours.

Courses, Grades, Attendance

Course Numbers. The University uses a four-digit numbering system for all courses. The first digit indicates the level of the course: 1 for freshman courses, 2 for sophomore courses, 3 for junior courses, 4 for senior courses, 5 for graduate courses, and 6 for school administration and Lawyer’s Assistants Program courses. The second digit indicates the semester-hour value of the course. The last two digits indicate the location of the course in the departmental sequence. English 2310, for example, is a sophomore level course with a value of three semester hours.

Courses represented by two numbers in series, e.g., Biology 1410, 1420, must be completed in their entirety before either part will be accepted toward a degree unless the description of the course specifically makes an exception.

Numbers in parentheses following a course title indicate the clock hours per week spent in lecture and laboratory, respectively.

The first four digits in course numbers represent individual courses. When a fifth digit is used, it represents an area of concentration within a more general course, and is intended to provide a more accurate transcript of a student’s work in a course.

Legislative Requirements in History and Political Science. Texas law provides that “no person . . . shall be granted an undergraduate degree . . . from any institution of higher learning supported by the State of Texas . . . except that he or she had taken and passed six semester hours of American history . . . .” Most students absolve this requirement by taking History 1310 and 1320; however, several options are available: (1) students may take History 1350, plus three semester hours of advanced United States history, (2) three of the six semester hours may be in Texas history. Three of the six semester hours may be taken by Advanced Standing Examinations. Full details on alternate approaches may be secured from the Chairman of the Department of History.

Texas law also requires every student graduating from a publicly supported institution of higher learning in the state to complete six semester hours of study in American government, which may include state government and the Texas Constitution. Three of the six semester hours may be taken by Advanced Standing Examinations.

Grade Symbols. Semester grades are determined by a student’s oral and written work as well as tests and quizzes, formal mid-semester quizzes, and formal final examinations given at the end of the semester. Grades are indicated by the following symbols: “A,” excellent work; “B,” good; “C,” average; “D,” passing; “F,” failure; “I,” incomplete; “W,” withdrawn passing; “F,” withdrawn failing. A grade of “P,” which is temporary and non-punitive, may be given in selected courses where the required clock hours necessary for completion extend beyond the regular semester or session. A grade of “X” may be assessed
when a student leaves a class or the University, under extremely unusual circumstances, and fails, through no fault of his own, to officially withdraw. A grade of “CR” is assessed when credit only is given for the course.

If a student’s work is incomplete during any semester, the work must be completed by an indicated deadline or, in the absence of such a deadline, during the first semester the student is in attendance after the grade of “I” is received. The course work must be completed no later than the end of the second semester following the semester in which the incomplete grade was received. The grade “I” is assessed for one reason only: Failure of a student to complete a vital portion (final examination, paper, etc.) of a course because of a situation beyond the control of the student.

Students may drop courses and receive no grade through the fifth week of a regular semester or the second week of a summer term. If a student drops a course after these time limits, he or she will receive a “W” in the course if the instructor decides that the student is passing the course with at least a grade of “D.” If the student is not passing the course, a grade of “F” will be given for the course dropped. The deadlines for dropping courses are: two weeks prior to final examinations during long semesters, and one week before final examinations in the summer terms.

**Grade-Point Average (Four-Point System).** The grade-point average (GPA) is the number of grade points earned divided by the number of semester hours attempted. Semester grade symbols have the following values:

- A = 4 points
- B = 3 points
- C = 2 points
- D = 1 point
- F = 0 points

To maintain an average of “C,” grade-points divided by semester hours attempted must equal at least 2.0.

The four-point system shall prevail except for those students who began their programs of study under a local three-point system, and then only for the six years allowed to complete the program.

When transferring credit earned at another institution to Southwest Texas State University, a student must have an average of at least “C” on all the courses offered for credit toward a degree or certificate. The student must also make at least a “C” average in all courses taken at Southwest Texas State University. At least six hours of the advanced work included in the major, or first teaching field, must be done in residence at Southwest Texas State University.

**Change of Grade.** Grades in individual courses may be changed when the involved faculty member certifies to the Director of Admissions and Registrar that an error has been made in the computing of the original grade. The grade change must be approved by the chairman of the department and the dean of the School.

**Class Attendance.** It is the policy of the University to encourage regular, punctual attendance of all classes. The University recognizes that the absolute necessity of regular attendance varies from department to department, from course to course and from student to student. The University has no mandatory class attendance requirements except:

1. Each faculty member will inform students of the absence policy of the course at the initial class meeting.
2. Students will insure that they are aware of the Absence Policy for each course in which they are enrolled.
Withdrawal. A student contemplating withdrawal from the University must contact the Office of the Director of Admissions and Registrar in person to officially withdraw. In certain cases, however, the registrar may accept withdrawal by letter or telephone. All students living in University residence halls must also contact the Residential Living Office in person to withdraw.

End of Semester. During the last five days of each long semester, no written examinations other than those covering daily assignments will be given. During the same period, themes or other assignments beyond the daily requirements will not be made. No final examination nor any portion of it is to be given during this time without the approval of the appropriate School Dean.

Academic Honors

Honor Roll (Dean's List). To be eligible for the Honor Roll (Dean’s List), at the close of any fall or spring semester, the undergraduate student must have earned a grade-point average of at least 3.5 in that semester on at least 12 semester credit hours. Graduate courses are counted.

Graduation With Honors/With Highest Honors. Students earning degrees with a grade-point average of at least 3.500 will be graduated “With Honors” and those who earn a grade-point average of at least 3.750 will be graduated “With Highest Honors.” Calculations of grade-point average to determine honors or highest honors status shall be based on all work applied to the baccalaureate degree including work completed in the last semester. Transfer students must also satisfy the same grade-point average requirement on credit earned at Southwest Texas State University.

Alpha Chi. To qualify for membership in Alpha Chi, a national college-wide honor society, a student must, as a basic requirement, have a grade-point average of 3.25 or higher (transfer grades and physical education activities excluded) and 30 semester hours in residence.

General Honors Program. The 18 semester hour General Honors Program is designed for academically talented students. The program begins in the spring semester of the freshman year, and continues through the senior year. Admission is by invitation only. Participation is voluntary. The Director of Honors handles admissions, dismissals, substitutions, degree programs, faculty selection, and all administrative matters involved in the program. To graduate in the General Honors Program, a student in the program must complete at least 12 semester hours of honors courses including the honors thesis, and maintain a minimum average of 3.0 in honors courses as well as the total degree program.

The following General Honors courses are now being offered:

*English 1390 History of Ideas I.
An honors colloquium centering on selected aspects of classical culture, their contributions to man's understanding of himself and his universe, and their relevance to contemporary society.

*English 2390 History of Ideas II.
An honors colloquium which explores man's quest for an ideal society and the ideologies that quest has produced.

*English 2391 History of Ideas III.
An honors colloquium focusing upon intellectual and cultural developments in western history which have particular significance for contemporary society.

*History 3390 The Nature of Society.
An honors colloquium which probes some of the antecedents of modern society as reflected in the philosophy, art, science, and religions of the medieval and early modern era of western Europe.

*May be repeated once with different emphasis for additional credit.
*History 3391 The Nature of Man.*
An honors colloquium exploring some of the philosophical and ethical problems in the realms of modern science, technology, urbanism, social, and cultural change.

*Philosophy 4390 Honors Thesis.*
A course designed to allow students in General Honors to pursue an independent project of research, study, or creative achievement, culminating in a paper, laboratory problem, field research problem, or creative effort of some size and scope.

**Probation and Suspension Regulations**

**Standard of Work Required for Continuation at the University.** Computation of grades for continuation at Southwest Texas State University will be based on the over-all grade-point average or the student's last semester, whichever benefits the student more.

Students will be admitted for the fall and spring semesters. Normally, students will not be suspended at the end of the fall semester solely for academic deficiency. A student having an over-all grade-point average lower than 2.0 is, however, considered academically deficient for meeting the graduation requirements on a four-point grade system.

The following definitions are used in the undergraduate suspension policy:

**Freshman**—Any student who has completed 29 or fewer semester hours.

**Sophomore**—Any student who has completed 30 through 59 semester hours.

**Junior**—Any student who has completed 60 through 89 semester hours.

**Senior**—Any student who has completed 90 or more semester hours.

**Part-time Student**—Any student attempting less than 12 semester hours in a long semester. All grades, except “W,” will be included.

**Full-time Student**—Any student attempting 12 or more semester hours during a long semester. All grades, except “W,” will be included.

**Fall Semester — Full-time Students.**

**Freshmen**—Students who have completed 29 or fewer semester hours must earn an over-all grade-point average of 2.0 or higher or must pass nine semester hours and earn 18 grade-points. Failure to meet one or the other of these standards should serve as an indication to the student that his or her work is academically deficient.

**Sophomores, Juniors, Seniors**—Students in these categories (see definitions above) must earn an over-all grade-point average of at least 2.0 or must pass 12 semester hours and earn 24 grade-points. Failure to meet one or the other of these standards should serve as an indication to the student that his or her work is academically deficient.

**Fall Semester — Part-time Students.** Part-time students earning less than a 2.0 grade-point average in the fall semester are considered academically deficient.

**Spring Semester — Full-time Students.**

**Freshmen**—Students who have completed 29 or fewer semester hours must earn an over-all grade-point average of 2.0 or higher or must pass nine semester hours.

*May be repeated once with different emphasis for additional credit.*
hours and earn 18 grade points. Failure to meet one or the other of these standards automatically places the student on scholastic suspension.

**Sophomores, Juniors, Seniors** — Students in these categories (see definitions above) must earn an over-all grade-point average of at least 2.0 or must pass 12 semester hours and earn 24 grade points. Failure to meet one or the other of these standards automatically places the student on scholastic suspension. Grades of "I" and "W" will be treated as follows: All computations made at the end of each semester will be based on the number of semester hours attempted, hours passed and grade-points earned; however, "W" grades will be omitted from the computation. An "I" grade will be treated as an "F." A suspended student who removes an "I" grade by completing the required work is responsible for requesting a new computation from his or her dean.

**Spring Semester — Part-time Students.** Part-time students must earn a 2.0 over-all grade-point average (four-point system), or a 2.0 grade-point average in the spring semester. Failure to meet one or the other of these standards automatically places the student on academic suspension.

**Summer Sessions.** All former students may enroll for the summer session regardless of their scholastic standing at the end of the spring semester; however, the scholastic standing at the end of the spring semester will prevail at the beginning of the next fall semester.

For example: A student who is on scholastic suspension at the end of the spring semester may enroll in the summer session, but may not enroll in the following fall semester even though he may have made a good scholastic average during the summer. The summer session will provide him the opportunity to earn credits and improve his over-all grade-point average. Summer work will not be considered in changing the suspension from the prior spring semester with the exception of students first suspended as explained below.

**Length of Suspension.** The duration for the first and second suspensions will be for one semester. The third suspension is for a full year, but reinstatement is not automatic. The student must obtain permission from the Dean of the University for that reinstatement after the completion of the one-year suspension. Students with three or more suspensions from another college or university usually will not be accepted by Southwest Texas State University.

Students under their first academic suspension from Southwest Texas State University, who have not been suspended previously from another college or university, may be reinstated for the fall semester if (1) they attend summer school at Southwest Texas State University, and (2) enroll in, and complete, a minimum of nine semester hours over two terms, and pass all work taken with a grade-point average of at least 2.0. Students are encouraged to seek help from the Counseling Center.

**Registration At Another Institution During Suspension.** A student who has been placed on academic suspension is not prohibited from registering at another institution; however, such academic work will not decrease the period of suspension and may lengthen the period of suspension if the work at another institution is at a level below the stated standards. Students who enroll for twelve or more semester hours at another institution while on suspension from Southwest Texas State University, will be considered transfer students if they return and will be required to have a 2.0 over-all grade-point average for re-admission.

**Effect of Suspension on Correspondence or Extension Courses.** A student may not enroll for an extension course from the University while on suspension; however, a student may enroll for correspondence courses.

**Warning.** An ineligible student who registers in the University shall be dropped by the Director of Admissions and Registrar, and the student shall not receive special consideration on his plea of lack of knowledge of his scholastic status.
Any cases where the circumstances are not covered by the above regulations shall be handled at the discretion of the Director of Admissions and Registrar.

Degrees and Teacher Certification

Application for Degree Outline. Upon completion of 45 to 60 semester hours, a student should request a degree outline through the departmental office of his or her major. When the outline is approved by the Dean of the appropriate School, it will list all courses required for graduation. The outline should be used in determining which courses to choose in each registration. Students receiving Veterans Administration Educational Assistance must provide the Office of Veterans Affairs a copy of the outline during the following semester before certification for subsequent enrollment.

Application for Degree Summary. When a student has completed all but 30 semester hours of his or her degree outline, the student should apply for a degree summary from the Dean of the appropriate School. The summary will list the courses remaining to be taken as well as grade-point averages in all college courses, in courses taken at Southwest Texas State University (for transfer students), in Academic Foundations, and in the major field of study. If any of the grade-point averages are lower than the average required for graduation, the summary can be used for deciding how the averages can be raised in the remaining course work.

Application for Degree. Students must indicate intent to graduate during registration for their last semester. The intent to graduate must be indicated on the registration form, and an $8.00 diploma fee must be paid along with the usual registration fees. Degree applications must be completed in the Office of the appropriate School Dean. If a student fails to complete the required courses in time for a planned graduation, the student must re-apply for the next graduation and pay a fee of $1.00 for changing the diploma insert. Failure to apply for graduation on time may require the issuance of a statement of completion, and the awarding of the diploma at the following graduation.

Grade Requirements for Degrees With Teacher Certification. To earn a degree and qualify for a teaching certificate, a student must meet the following requirements:
1. A grade-point average of at least 2.0 in all courses attempted.
2. A grade-point average of at least 2.25 in Academic Foundations (including grades of “C” or better in English 1310, 1320), in secondary teaching fields, in the first specialization of an elementary education major, and in required professional education courses (with no grades below “C”).
3. No more than 30 semester hours of “D” grades may be offered toward the degree or certificate.

Grade Requirements for Degrees Without Teacher Certification. To earn a degree without certification, a student must meet the following requirements:
1. A grade-point average of at least 2.0 must be maintained in Academic Foundations, in the over-all average, and in the student’s minor.
2. A grade-point average of at least 2.25 must be maintained in the student’s major.
3. No more than 30 semester hours of “D” grades may be offered toward a degree.

English Proficiency. Candidates for graduation are expected to have demonstrated proficiency in English usage acceptable to the faculty committee in charge of this requirement.

Acceptable Hours Beyond Major and Minor Requirements. A maximum of six semester hours within a major, or first teaching field, may be counted as electives after the minimum requirements of the major or teaching field are fulfilled. Six semester hours may be counted as electives in a minor or second
teaching field once the minimums have been met. Approval of elective credit beyond the standard maximum of six semester hours must be sought from the appropriate Dean.

Other Requirements

Repeating Courses. A student may repeat any course as and when he or she desires. In a repeated course, only the last grade earned ("W's" excluded) is utilized in computing the grade-point average. This provision is applicable to all undergraduate students. A Veterans Administration student desiring to repeat a course must first obtain the approval of the Veterans Affairs Office as Veteran Administration regulations are more restrictive.

Residence. To qualify for graduation with a bachelor's degree, a student must have been in residence in the University for at least two semesters of the regular session, or 30 weeks in summer sessions, provided that he must have done in residence at least 30 semester hours of work (at least 24 semester hours thereof advanced) including 24 semester hours of the last 30 hours offered toward graduation.

Second Baccalaureate Degree. To earn a second bachelor's degree, the applicant must earn a minimum of 30 semester hours as prescribed by the chairman of his major department.

Student Indebtedness. All the University property in possession of a student must be returned and all arrearages to the University, including past due indebtedness to loan funds, must be satisfactorily adjusted before the student is eligible to receive a statement of good standing, an official transcript of credit, certification, graduation, or re-admission to the University. Moreover, continued failure to adjust such arrearage may make it necessary to deny a student the privilege of attending class.

Time Limit (Degree). A student who is a candidate for a degree may graduate under the requirements for the respective degree set forth in the Southwest Texas State University catalog in force during the session in which he first enrolled provided he graduates within six years from the end of the session. After expiration of such a period of time, he may be held to meeting the requirements as outlined in the catalog.

Transfer Credit from a Junior College. In accordance with the standards of the Association of Texas Colleges, Southwest Texas State University accepts a maximum of 66 semester hours from accredited junior colleges. After 66 semester hours have been accepted, and the student has successfully completed one regular semester of work in residence at Southwest Texas State University, a maximum of two courses may be completed at a junior college subject to the written approval of the student's Dean.
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Academic Foundations
(Requirements for Graduation)

School of Creative Arts
School of Liberal Arts
School of Science

All candidates for graduation with a bachelor's degree in the Schools listed above, are required to offer toward graduation work in Academic Foundations affording common background and foundations of our social and cultural heritage.

Academic Foundations requirement for candidates seeking degrees qualifying for certification in Texas public schools amount to approximately two years of study (Items I-VI below) or a minimum of 56 semester credit hours.

Academic Foundations requirement for non-certification candidates amounts to approximately one and a half years of study (Items I-V below) or a minimum of 47 semester credit hours.

I. SOCIAL SCIENCES, 12 semester hours:
   History 1310, 1320, History of the United States.
   Political Science 2310, Principles of American Government.
   *Political Science 2320, Functions of American Government.

II. HUMANITIES, 10 semester hours:
   A. Literature, 6 semester hours:
      English 2310, 2320, A Survey of English Literature, or
      English 2330, 2340, World Literature, or
      English 2370, 2380, Masterpieces.
   B. The Arts, 2 or 3 semester hours:
      Art 3213, Introduction to the Fine Arts, or Art 2300, The Arts in Society, or
      Theatre Arts 3213, Introduction to the Fine Arts, or Theatre Arts 2300, The Arts in Society, or
   C. Philosophy, 2 or 3 semester hours:
      Philosophy 3201, Philosophies Men Live By, or
      Philosophy 1305, General Philosophy.

III. SCIENCE, MATHEMATICS, MODERN LANGUAGES; a total of 12 semester hours to be taken from two of these fields.

IV. COMMUNICATIONS, 9 semester hours.
   English 1310, 1320, Reading and Writing.
   Speech Communication 1310, Fundamentals of Speech.

V. FOUR PHYSICAL EDUCATION ACTIVITY COURSES AND/OR MARCHING BAND, 4 semester hours.

   Any combination of four units of activity courses and/or marching band in any sequence totaling a minimum of four semester credit hours.

   Students who complete the Air Force ROTC Four-Year Program may substitute two semester hours of other Academic Foundations courses for two hours of physical education, i.e., they are required to present only two semester hours of physical education activity courses for graduation. This substitution may not be made by students in the Two-Year Program.

*Students who complete at least three semester hours of credit in the junior and senior levels of Air Force ROTC work may substitute three semester hours of other Academic Foundations courses for Political Science 2320.
Note:
A student may petition for permission to substitute another course from the same area of study for a course specified above. Permission of the chairman of his major department and the dean of the School is required.

VI. Additional courses to meet the total semester hour requirement in Academic Foundations may be selected from the following list, which also specifies the maximum number of semester hours that may be credited as Academic Foundations in the various subjects.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Hours</th>
<th>Max Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture 3379, 4347</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Bible or Religion</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>8 hours</td>
<td></td>
</tr>
<tr>
<td>Business Administration</td>
<td>3361</td>
<td>3 hours</td>
</tr>
<tr>
<td>Chemistry</td>
<td>8 hours</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>12 hours</td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>8 hours</td>
<td></td>
</tr>
<tr>
<td>General Science</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>German</td>
<td>8 hours</td>
<td></td>
</tr>
<tr>
<td>Health Education 2338,3348</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>History 1310, 1320</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Home Economics 1310,1320, 3315, 3339</td>
<td>12 hours</td>
<td></td>
</tr>
<tr>
<td>Industrial Arts 1450</td>
<td>4 hours</td>
<td></td>
</tr>
<tr>
<td>Journalism 1450, 3333</td>
<td>7 hours</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Physical Education activities</td>
<td>4 hours</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>8 hours</td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Psychology 2310</td>
<td>3 hours</td>
<td></td>
</tr>
<tr>
<td>Russian</td>
<td>8 hours</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>8 hours</td>
<td></td>
</tr>
<tr>
<td>Speech Communication</td>
<td>6 hours</td>
<td></td>
</tr>
<tr>
<td>Theatre Arts</td>
<td>6 hours</td>
<td></td>
</tr>
</tbody>
</table>

Academic Foundations
(Requirements for Graduation)

School of Applied Arts
School of Business
School of Education
School of Health Professions
Occupational Education

All candidates for graduation with a bachelor's degree in the Schools and Occupational Education listed above, are required to offer toward graduation work in Academic Foundations affording common background and foundations of our social and cultural heritage.

Candidates seeking degrees qualifying for certification in Texas Public Schools must meet Academic Foundations requirements for that certificate. See page

Academic Foundations requirement for non-certification candidates amounts to approximately one and a half years of study (Items I-V below) or a minimum of 44 semester credit hours.

I. SOCIAL SCIENCE: 12 semester hours (must meet legal requirements)
   American History 1310, 1320
   *American Government, 6 semester hours

II. HUMANITIES AND BEHAVIORAL SCIENCES: 7-9 semester hours
   Literature, 3-6 hours, 3 hours required
   Art, Theatre Arts, or Music 3212 (or 2300), 2-3 hours
   Philosophy 3201 (or 1305), 2-3 hours

*Students who complete at least three semester hours of credit in the junior and senior levels of Air Force ROTC work may substitute three semester hours of other Academic Foundations courses for Political Science 2320.
III. SCIENCE, MATHEMATICS, MODERN LANGUAGES: A total of 12 semester hours to be taken from two of these fields.
- Biological Science
- Mathematics
- Modern Languages
- Physical Science

IV. COMMUNICATIONS: 9 semester hours.
- English (grammar and composition), 6 hours required
- Speech Communication
- Computer Science

V. PHYSICAL EDUCATION ACTIVITY COURSES AND/OR MARCHING BAND, 4 semester hours.

Any combination of four units of activity courses and/or marching band in any sequence totaling a minimum of four semester credit hours.

Students who complete the Air Force ROTC Four-Year Program may substitute two semester hours of other Academic Foundations courses for two hours of physical education, i.e., they are required to present only two semester hours of physical education activity courses for graduation. This substitution may not be made by students in the Two-Year Program.

Certificate Requirements

**Administrator's Certificate.** New regulations, adopted in 1972, provide a 45-hour program for a certificate for "Middle Management" (including the principalship) and a 60-hour program for certification as a superintendent. Applicants beginning graduate work should enter this program. Consult with the Director of Professional Certificates, Department of Education, for details.

Admission to this program will be on recommendation of a screening committee, which will judge each candidate on his previous academic record, experience record, score on the Graduate Record Examination, and on the basis of a formal interview.

**Instructions for Post Graduates from a Texas College or University.**
1. Apply for admission through the Graduate School Office.
2. Apply to the Certification Officer for a deficiency plan.
3. Successfully complete the deficiencies.
4. Apply for certification in the Certification Office.

**Instructions for Post Graduates from Colleges or Universities Outside the State of Texas.**
1. Persons holding a valid teacher certificate from another state must apply to the Division of Teacher Certification of the Texas Education Agency for either a certificate or a deficiency plan. Maps and addresses are available in the Certification Office.
2. Present the Texas Education Agency deficiency plan to the Southwest Texas State University Certification Officer, who will transpose the Texas Education Agency requirements into Southwest Texas State University course numbers.
3. Persons who do not currently hold a valid teacher certificate should submit an official transcript of all college work along with a request for a deficiency plan to the Certification Officer.
The University Curriculum

Although Southwest Texas State University was originally established for training teachers, recent years have brought changes both in purposes and curricula to the point that four curriculum areas are predominant. They are (1) the original one of teacher preparation, including the preparation of vocational-technical teachers, (2) the baccalaureate degree intended for those who have other aims, (3) pre-professional training for the various professions, and (4) certificate, diploma, and degree programs in various health professions.

In general, each curriculum emphasizes, first, a cultural background which includes courses in the major fields of human knowledge, these desiging to give a general cultural background during and after which specialized preparation is begun; and second, specialized fields, usually termed major and minors, where the student selects an area of subject matter in which he has a particular interest or aptitude.

**Cultural Background.** A person, to be able to solve the recurring problems of everyday life, should have an appreciation and understanding of the broad fields of human knowledge which we usually classify as the humanities, the social sciences, the natural sciences, and the arts. Approximately one-half of the courses pursued are taken in these four large areas.

These basic courses, required of all students, are so arranged that specialization is cumulative and progressive, insuring greater unity in any curriculum chosen. Since the courses commonly known as cultural background are designed to give better understanding of the problems of contemporary life, the student, after such study, is able to decide which areas have the greatest appeal to him for intensified study, and which profession or vocation he should follow. In the case of mature students pursuing the Bachelor of Science degree in Occupational Education, some deviation in the above described sequence is allowed.

**Specialized Fields.** All University policies governing the academic preparation of professional workers require a thorough command of subject matter in majors and minors. It is particularly important that the prospective teacher's knowledge be comprehensive and thorough to the end that good scholarship must be one of the primary considerations.

In the strictly professional areas and in the pre-professional courses, specialization is dominated by the requirements of the profession which the student chooses to follow. To satisfy the requirements for a major, the student must complete from 24 to 48 semester hours of work in the field of his choice. The student, in order to gain the most, should be careful and purposeful in the selection of majors and minors and of courses in order that the needs and requirements of the profession he expects eventually to follow will be met.

**Curriculum for Secondary School Teachers**

**Leading to the Degree of Bachelor of Science in Education**

*(128 semester hours with 40 advanced)*

**Freshman Year:** English 1310, 1320; History 1310, 1320; Speech Communication 1310; 12 semester hours total are required with two of the following fields to be represented: science, mathematics, modern language, geography (see the Department of Geography and Planning for degree programs); physical education activities, two semester hours; and other subjects to total 32-34 semester hours for the year.

**Sophomore Year:** English 2310, 2320, or 2330, 2340 or 2370, 2380; Political Science 2310, 2320; major (first teaching field) and minor (second teaching field)
courses as required; science, mathematics, modern language, geography (see Department of Geography and Planning for degree program) requirements not completed; physical education activities, two semester hours; other subjects to total 32-34 semester hours.

**Junior Year:** Major (first teaching field) and minor (second teaching field) as required; Philosophy 3201 (or 1305); Art, Theatre Arts, or Music 3213 (or 2300); Education, six semester hours; other subjects to total 32 semester hours.

**Senior Year:** Major (first teaching field) and minor (second teaching field) courses as required; Education, 12 semester hours advanced, including 4681; elective courses to total 128 semester hours required for graduation.

The course making up the first teaching field (major) may be selected from any of the following: Art, biology, business administration, chemistry, English, French, economics, geography, German, guidance studies, health education, political science, history, journalism, mathematics, physical education, physics, psychology, social science, sociology, Spanish, special education (speech-hearing therapy), speech communication.

The courses making up the second teaching field may be selected from any of the major fields except elementary education, agriculture, home economics, industrial arts, or special education.

Third teaching fields are available in physical science and earth science.

Majors and minors should be selected not later than the sophomore year with the advice of the department head, subject to approval by the Dean of the School in which the student registers.

The above curriculum meets requirements for secondary school certification known as Plan I, wherein the student qualifies for two teaching fields. Plan II, a composite arranged involving several areas, is offered in music, science, and social studies. Certification is in one area only. To understand the difference, students should consult their department head or the Dean of their School.

Plan III is preparation for teaching in one subject with only one eligible department: Industrial Arts. Information is available from the department head on Plan III, which in most cases will carry a different degree from the Bachelor of Science in Education.

Vocational Programs are available in agriculture and home economics only.

**Curriculum for the Bachelor of Arts Degree**

(128 semester hours with 40 advanced)

Science Requirement: Four semesters of work in at least two the departments of biology, chemistry, mathematics, philosophy (logic only), and physics, and, in certain cases, geography (see the Department of Geography and Planning), provided two of the semesters are in the same laboratory science.

Modern Language Requirement: A proficiency level of successful completion of the second semester of the sophomore course in the language, provided that at least six semester hours have been earned. See Department of Modern Languages.

Philosophy 3201 (or 1305) required.

**Freshman year:** English 1310, 1320; History 1310, 1320; Speech Communication 1310; two semesters in the same laboratory science (usually biology, chemistry or physics); two additional semesters from other requirements stated above; two semesters of physical education activities and other subjects to total 32-34 semester hours of the year.

**Sophomore year:** English 2310 and 2320, or 2330 and 2340, or 2370 and 2380; Political Science 2310, 2320; modern language as required; two semesters of physical education activities; science if not completed; other courses to total 32-34.
Junior year: Major and minor courses as required; modern language as required; Philosophy 3201 or (1305); Philosophy 2330 if required; Art, Theatre Arts, or Music 3213 (or 2300); other courses to total 32 semester hours.

Senior year: Major, minor, and elective courses to make the total of 128 semester hours required for graduation.

Majors and minors may be selected from art, biology, business administration, chemistry, economics, English, French, geography, German, guidance studies, history, journalism, mathematics, philosophy, physics, political science, psychology, sociology, Spanish, speech communication, and theatre arts. Agriculture, anthropology, computer science, health education, home economics, industrial arts, criminal justice, music, physical education, and social work may be used as minors. Students seeking a certification program with this degree must meet all requirements for certification.

Curriculum for the Bachelor of Science Degree (128 semester hours with 40 advanced)

Majors and minors may be selected from biology, chemistry, computer science, physical and applied geography, mathematics, physics, psychology.

Freshman year: English 1310, 1320; History 1310, 1320; Speech Communication 1310; Mathematics 1311 (or 1315); biological or physical chemistry or physical science; physical education activities, two semester hours; and other subjects (see catalog requirements for the major and minor) to total 32-34 semester hours.

Sophomore year: English 2310, 2320 or 2330, 2340 or 2370, 2380; Political Science 2310, 2320; science as required by the major; modern language, two courses, physical education activities, two semester hours; and other subjects to total 32-34 semester hours.

Junior year: Major and minor courses as required, Philosophy 3201 (or 1305); Art, Theatre Arts, or Music 3213 (or 2300); and other courses to total 32 semester hours.

Senior year: Major, minor, and elective courses to make the total of 128 semester hours required for graduation.

Students seeking certification with this degree must meet all requirements for certification.

Other Baccalaureate Degrees Offered (128 semester hours with 40 advanced)

<table>
<thead>
<tr>
<th>Degree Program</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bachelor of Applied Arts and Science</td>
<td>253</td>
</tr>
<tr>
<td>2. Bachelor of Arts in International Studies</td>
<td>241</td>
</tr>
<tr>
<td>3. Bachelor of Business Administration</td>
<td>90-91</td>
</tr>
<tr>
<td>4. Bachelor of Business Administration with a Major in Computer Information Systems</td>
<td>93</td>
</tr>
<tr>
<td>5. Bachelor of Fine Arts (Theatre Arts)</td>
<td>132</td>
</tr>
<tr>
<td>6. Bachelor of Fine Arts (Studio Art or Commercial Art)</td>
<td>114</td>
</tr>
<tr>
<td>7. Bachelor of Music (Music, All-level)</td>
<td>123</td>
</tr>
<tr>
<td>8. Bachelor of Music (Music Education or Performance)</td>
<td>122-124</td>
</tr>
<tr>
<td>9. *Bachelor of Music Education</td>
<td>121</td>
</tr>
<tr>
<td>10. Bachelor of Science in Agriculture (General or Teaching)</td>
<td>64-65</td>
</tr>
<tr>
<td>11. *Bachelor of Science in Commercial Art</td>
<td>115-116</td>
</tr>
<tr>
<td>12. Bachelor of Science in Criminal Justice</td>
<td>71-72</td>
</tr>
</tbody>
</table>

*Degree programs to be phased out.
13. Bachelor of Science in Education (Elementary Education) .......... 142-143
14. Bachelor of Science in Education (Speech and Hearing Therapy) . 175-176
15. Bachelor of Science in Health Education ................................ 158-159
16. Bachelor of Science in Health Professions .......................... 186, 196-197
17. Bachelor of Science in Home Economics (General or Teaching) .. 75
18. Bachelor of Science in Industrial Arts (General or Teaching) .... 163-164
19. Bachelor of Science in Medical Record Administration ........... 197
20. Bachelor of Science in Medical Technology .......................... 187
21. Bachelor of Science in Occupational Education .................... 253
22. Bachelor of Science in Recreational Administration ............... 161
23. Bachelor of Social Work .............................................. 245

Associate Degrees Offered
1. Associate in Applied Science ........................................ 185
2. Associate of Arts ...................................................... 185-186

**Correspondence**

Correspondence study provides an alternate method to earn undergraduate semester credit hours. Each course package provides a complete outline, which is correlated with the course textbook, and detailed specification of all assignments. All of the correspondence packages were developed, and are periodically up-dated, by full-time faculty members at Southwest Texas State University.

Correspondence courses may be taken by those who are not currently enrolled in a college or university, as well as those who are now enrolled at Southwest Texas State University or any other institution of higher education.

**General Regulations.** No student who is registered as a full-time student in this or any other institution may be registered for correspondence credit work without written permission from the Dean of the appropriate School of the University.

The maximum amount of work completed by correspondence, which may be applied to the earning of a baccalaureate degree, is limited to 18 semester hours.

A student who is academically ineligible in any college or university may enroll for correspondence work.

**Courses by Correspondence**

Correspondence courses, taught by regular faculty members, are available. The following regulations are summarized from the more detailed ones to be found in the Correspondence Bulletin, which may be obtained from the Office of Correspondence. Students must meet eligibility standards.

1. Students may register and begin work at any time. A course should be completed at least three weeks before the credit is to be used for graduation or for certification.
2. A three-hour course should be completed in four and one-half months. A course may not be completed in less than 45 days. The maximum time is one year from the date of registration. In emergency situations the time for completing a course may be extended by payment of an additional fee.
3. Each correspondence course for credit must be completed with a final written examination taken in the Office of Correspondence on the campus, or under the supervision of an approved examiner at an accredited college or university.
4. Textbooks for correspondence courses are furnished by the student. These may be obtained from the University Bookstore.
Fees. The registration fee for a correspondence course is $60.00, payable in advance.

Credits. Correspondence courses generally provide three semester hours of credit. They have the same prerequisite as on-campus courses.

Enrollment. Persons wishing to enroll for correspondence work should address a request for information to the Coordinator of Correspondence.

Client-Funded Courses By Extension

Location of Courses. Extension courses are offered at various locations, including designated off-campus sites, various regional locations, out-of-state, and outside the continental United States. Courses are established in response to demand or the stated needs of groups of potential students. Scheduling and location may be negotiated to meet the mutual satisfaction of extension students and University faculty. The courses are designated for persons who wish to continue university studies for degree credit and for persons required to pursue inservice training, but unable to become resident students on campus.

Regulations. Students on active suspension from this or any university are ineligible for extension course credit. Full-time students at this or another university may not enroll in extension courses without written permission from the Dean of the appropriate School of the University. A student from another institution who wishes to transfer extension credit must have the prior approval of his/her home institution. No student may enroll for extension courses such that he creates an academic overload, without the prior, written approval of his/her School Dean and the chairman of his/her major academic department. A person who is matriculated as a student at Southwest Texas State University may enter an extension course as a special student. He will receive no degree credit except by special permission, and only after he has met regular University requirements and been processed by the Office of Admissions. Transcript records are maintained for all credit earned by extension. Enrollment for an extension course does not constitute official admission into the University.

A maximum of 30 semester hours for Southwest Texas State University undergraduate credit may be completed through a combination of Correspondence and Client-Funded Extension Credit. An individual who is employed as a teacher may present for credit toward a certificate or degree not more than six hours of extension credit during one semester, nor more than nine hours during one public school year.

Faculty. Client-Funded courses by extension are taught by Southwest Texas State University campus faculty members.

Courses Offered. Courses have been offered in education, English, business administration, modern languages, political science, art, social sciences, and other areas. Most courses listed in the University catalog are eligible for approval and staffing as extension courses, except where special resources such as laboratory facilities cannot be obtained. The course credit, content, and contact requirements in Client-Funded, off-campus courses are the same as for resident courses. The instructor and his department chairman are responsible for assuring accreditability.

Fees. The fee for a Client-Funded course by extension is $75.00 per student per course payable in advance at registration. The fee for auditing is the same. When sufficient students are not registered for a course, the course is cancelled or postponed and any fees collected are returned. If a student drops a course once it has begun, he is considered in default of a contract, and no refund is made. In special cases, groups may contract a course for fewer than the normal number of students.
**Enrollment.** Persons wishing to enroll in off-campus Client-Funded courses are encouraged to contact the Coordinator, Office of Extension Studies, New Education Building 2020, (512) 245-2129.

**Minor Requirements (Second Teaching Fields)**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ART</strong></td>
<td>1314, 1321, 1354, 2321, (or 2370), 3322 (or 3327), 3337 (or 3365), 4323, plus three semester hours of advanced art history.</td>
</tr>
<tr>
<td><strong>BIOLOGY</strong></td>
<td>1410, 1420, 2340-2350 (or 2430), 3450, and nine semester hours advanced. <em>Not to include 1310, 2440, 3305, 3306, 3320, 3351, or 4305.</em> One year of chemistry.</td>
</tr>
<tr>
<td><strong>BUS. ADMIN.</strong></td>
<td>27-30 semester hours to include Business Administration 1321 (or 1331 and 1332), 1325, 3315, 3333, 3361; Accounting 2361, 2362; Management 3303; Marketing 3343. Secretarial science students shall take six semester hours of shorthand.</td>
</tr>
<tr>
<td><strong>CHEMISTRY</strong></td>
<td>1410, 1420, 2410, 2420, 3410, 4435, and 4465.</td>
</tr>
<tr>
<td><strong>COMPUTER SCIENCE</strong> (See Department of Mathematics and Computer Science)</td>
<td>1308, 1318, 2308, 4348, 4358, 4368, and six semester hours of electives from the Mathematics Computer Science curriculum of which three semester hours must be advanced.</td>
</tr>
<tr>
<td><strong>DANCE (Physical Education)</strong></td>
<td>2108, 2109, 2365, 3320, 3330, 3332, 3365, 4365, 4366, 4367. Physical Education activities 1111b, 1111c, 1181a, 1182a count as Academic Foundations. Students are encouraged to enroll in a dance activity every semester.</td>
</tr>
<tr>
<td><strong>EARTH SCIENCE</strong></td>
<td>Program under revision. Undergraduate students consult the Dean of the School of Science. Graduate or Post Graduate students consult the Teacher Certification Officer.</td>
</tr>
<tr>
<td><strong>ECONOMICS</strong></td>
<td>24 semester hours including 2310, 2320, 3314, 3315, and 12 hours advanced.</td>
</tr>
<tr>
<td><strong>ENGLISH</strong></td>
<td>1310, 1320, 2310, 2320, 3312 (or 3319 or 4310), 3387, and six hours advanced <em>not to include 3385.</em> Additional information about minor requirements at the beginning of the Department of English section in the catalog.</td>
</tr>
<tr>
<td><strong>GEOGRAPHY</strong></td>
<td>1310, 2311, 3303, 3313, 4340, and nine semester hours advanced. Geography 1414 and 1415 are recommended and will satisfy the laboratory science requirement.</td>
</tr>
<tr>
<td><strong>GUIDANCE STUDIES</strong></td>
<td>24 semester hours, including Education 2350, 2353; Industrial Arts 2385; Education 3355, 3358, 3363, and two courses from 3352, 4378, 4389.</td>
</tr>
<tr>
<td><strong>HEALTH EDUCATION</strong></td>
<td>1310, 3360, 4311, 4336, and nine semester hours from 2338, 2340, 2354, 3348, and three semester hours from 3301, 3342, 3350; Home Economics 3339.</td>
</tr>
<tr>
<td><strong>HISTORY</strong></td>
<td>1310, 1320, 2310, 2320, and 12 hours advanced divided equally between Group A and Group B courses.</td>
</tr>
<tr>
<td><strong>JOURNALISM</strong></td>
<td>1313, 1374, 1450, 3383, and 4310, plus eight semester hours advanced.</td>
</tr>
<tr>
<td><strong>MATHEMATICS</strong></td>
<td>1315, 1317, 2363, 2371, 2372, 3315, 4304, and six hours advanced.</td>
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</table>
MODERN LANGUAGES ..... 24 semester hours, including 12 hours advanced language courses and Linguistics 4307. Recommend the inclusion of 3310 and 4340.

PHYSICAL EDUCATION ..... 2356, 3320, 3322, 3323, 4351, and three semester hours elective theory; 1178, 1181 (or 1182), 1190 (or 1191 or 1192), and three activities not to include varsity sports Academic Foundations courses to include 1170, 1175, 1176, 1177.

PHYSICAL SCIENCE ..... Available only as a post graduate program or as a third teaching field. Chemistry 1410, 1420 (or 1430), two semesters of physics or physical science, two semesters of advanced chemistry and/or physics chosen with the advice and consent of the Dean of the School of Science, Chemistry (or Physics) 4336, 4337.

PHYSICS ..... 24 semester hours including 1430, 2310, 2420, 3312, 3314, 3411, and one advanced course.

POLITICAL SCIENCE ..... 24 semester hours, including 1309 and at least one advanced political science course must be taken in four of the following groups:

Group I, American Government and Politics;
Group II, Political Theory and Methodology;
Group III, Public Law and Public Administration;
Group IV, International Relations;
Group V, Comparative Government.

PSYCHOLOGY ..... 24 semester hours including 2310, 2315, 2330, 3387, 3388, 4335; three hours from 3317, 3320, 4325, 4356 or 4370; plus three hours to be chosen from 2311, 3315, 3319, 4338 or 4348.

SOCIOLOGY ..... 24 semester hours including 2310, 3305 or 3306, 3307, 3308, and 12 semester hours of which nine hours must be advanced.

SPEECH COMMUNICATION ..... Two of these — 1310, 1315, 1340; 2325, 2330, 3327, 4310, plus six advanced hours from any other speech communication courses except 1350, 1370, 2111, 2320, 3351, 3370, 4352 or 4370. Strongly recommended 3315 and 3336.

THEATRE ARTS ..... 1154A, 1154B, 1254, 1255, 1350, 1358, 3367. Speech Communication 1340 is recommended on academic core.

Minor Requirements (No Certificate)

AGRICULTURE ..... 18 semester hours, including nine hours advanced.

ANTHROPOLOGY 26 semester hours, including 2312, 2414, 2415, and at least nine hours advanced.

ART ..... 1314, 1321, 1354, 2321 (or 2370), 3322 (or 3327), 3337, 3365, plus three semester hours advanced art history.

BIOLOGY ..... 1410, 1420, 2430, and nine semester hours of which six are advanced. Not to include Biology 1310, 2440, 3305, 3306, 4302, 4303, or 4305. One year of chemistry.

*If speech communication is NOT the first teaching field, 4310 must be taken in place of 4357.
BUS. ADMIN. . . . . 27 semester hours including Business Administration 1321, 3333, 3361; Accounting 2361, 2362; Management 3303, 4335; Finance 3312; Marketing 3343.

CHEMISTRY . . . . 1410, 1420, 2410, 2420, 3410, and four hours advanced.

COMPUTER SCIENCE (See Department of Mathematics and Computer Science) . . . . Mathematics 2308, 2318, 3408, plus 12 semester hours (nine advanced) from the Mathematics Computer Science Curriculum.

CRIMINAL JUSTICE . . . . 1310, six semester hours of courses from the criminal justice professional core, and nine semester hours of advanced criminal justice courses as required by either the Law Enforcement or Corrections concentration.

ECONOMICS . . . . 18 semester hours, including 2310, 2320, and at least 12 hours advanced.

ENGLISH . . . . 1310, 1320, 2310, 2320, 3312 (or 3319 or 4310), and nine hours advanced literature not to include 3385 or 3387. Additional information about minor requirements at the beginning of the Department of English section in the catalog.

GEOGRAPHY . . . . 1310, 2311, 3303, 3313, 4340, and nine semester hours advanced. Geography 1414 and 1415 are recommended and will satisfy the laboratory science requirement.

GUIDANCE STUDIES . . . . 18 semester hours, including Education 2350, 2353, 3355, 3358, 3363, 4378 (or 4389).

HEALTH EDUCATION . . . . 3340, 4340, 4350, and nine hours from 2338, 3348, 3350, 4311, Home Economics 3339.

HISTORY . . . . 1310, 1320, 2310, 2320, and 12 semester hours advanced, divided equally between Group A and Group B courses.

HOME ECONOMICS . . . . 18 semester hours, including nine semester hours advanced.

INDUSTRIAL ARTS 24 semester hours are required for a minor in industrial arts. Twelve must be advanced. Other courses will be determined by conference with the chairman of the Department of Industrial Arts.

JOURNALISM . . . . 1313, 1374, 1450, 3310 or 3367, 3383, plus eight semester hours advanced.

LINGUISTICS . . . . Twenty-one semester hours, including English 3312, 4310; Linguistics 3340, 4330; Speech Communication 3317; either English 4300 or Spanish 3320; three semester hours from: Special Education 2359, French 3310, German 3310, or Spanish 3310.

MATHEMATICS . . . . 21 semester hours including 2371, 2372, and three advanced courses.

MODERN LANGUAGE . . . . Completion of at least four advanced courses.

MUSIC . . . . 1411, 1412, 3207, 3350, and seven hours advanced; ensemble and/or applied music, four hours.

PHILOSOPHY . . . . 18 semester hours, including 12 hours advanced.

PHYSICAL EDUCATION . . . . 2356, 3320, 3322, 3323, 4351, three semester hours elective theory; 1178, 1181 (or 1182), 1190 (or 1191 or 1192), and three
activities not to include varsity sports. Academic Foundations courses to include 1170, 1175, 1176, 1177.

**PHYSICS** ........ 24 semester hours including 1430, 2310, 2420, 3312, 3314, 3411, and one advanced course.

**POLITICAL SCIENCE** ........ 18 semester hours, including 1309 and at least nine hours advanced.

**PSYCHOLOGY** ....... 2310, 2330, plus 12 additional hours of which six must be advanced.

**SMALL BUSINESS MANAGEMENT** ... 27 semester hours, including 2361, 2362, 3302, 3303, 3333, 3340, 3343, 4335, and 4336.

**SOCIAL WORK** .... 18 semester hours which includes: 2350, 2375, 3330, 3335, plus six semester hours of social work electives excluding 4645, 4650, and 4950.

**SOCIOLOGY** .... 18 semester hours, including 2310 and at least 12 hours advanced.

**SPEECH COMMUNICATION** ........ Two of these—(1310, 1312, 1315, 1340); 2325 or 2330; 3327 or 4312 or 3336; plus 12 hours from any other speech communication courses except 1350, 1370, 2111, 2320, 3351, 3370, 4352, and 4370. Nine hours must be advanced.

**THEATRE ARTS** .... 1154A, 1154B, 1254, 1255, 1350, 1358, 3362, and nine additional hours, six of which must be advanced, from major specializations chosen in consultation with the Director of Theatre. Recommend six additional hours as theatre arts electives from the chosen specialization. Speech Communication 1340 is recommended on the academic core.

### Pre-professional Curricula

Students preparing for the study of medicine, veterinary medicine, dentistry, or law, should enroll under the Bachelor of Arts or Bachelor of Science degree as suggested by advisers responsible for each area are listed below. Prior to each registration, any student enrolled in a pre-professional course should consult with his adviser.

**Allied Health Sciences:** Students interested in areas of Allied Health Sciences, including nursing, physical therapy, occupational therapy, dental hygiene, etc., see Department of Allied Health Sciences section of catalog.

*Advisor: Contact the Department of Allied Health Sciences*

**Combination Degree:** Upon the successful completion of at least 96 semester hours of prescribed work in this institution, a student who has been subsequently certified by the dean of an approved school of medicine, dentistry, or medical technology as having satisfactorily completed one year of work in that institution may be granted the appropriate baccalaureate degree by Southwest Texas State University. The student is expected to meet all catalog requirements for the degree. The minimum amount of residence work must be the last 30 of the 96 semester hours mentioned above.

*Advisor: Contact the Dean of the School of Science*

**Dentistry:** Most dental schools require two years of college work for entrance; however, many of the students accepted into dental schools have more than this. Included in the required courses for dental school are the following: Chemistry 1410, 1420, 2410, 2420; Biology 1410, 1420, 2340, 2350, 3495; one or
more additional biology courses selected from the following: 3450, 3480, 3490, 4330, 4340; Physics 1410, 1420 (or 1430, 2420); English 1310, 1320. It is recommended that the students complete in addition to the above courses six hours of sophomore literature; Mathematics 1315, 2321, 2331; Chemistry 3410 and 4465; Political Science 2310, 2320; History 1310, 1320; Physical Education activities, four semester hours; and electives. If a student anticipates a later application for the combination degree shown above, he should include Philosophy 3201 (or 1305); Art, Theatre Arts, or Music 3213 (or 2300); Speech Communication 1310; and two semesters of a modern language. It should be noted the above suggested program is more rigorous than the minimal courses required by most dental schools.

**Adviser:** Contact the Dean of the School of Science

**Engineering:** Students enrolled in the pre-engineering curriculum normally spend three to six semesters taking those courses basic to the specific field of engineering in which they intend to specialize, thereafter transferring to the engineering school of their choice. However, because of the diversity of choices of curricula open to students in the field of engineering, pre-engineering students should, from the time they first enroll, regularly consult with their adviser in the selection of their course-work. Failure to do so may result in loss of transfer credit. Even the acceptance of transfer credit by an engineering school for a course does not necessarily mean the course may be counted toward a degree in engineering. Only those courses acceptable by the Dean of the student's elected engineering school may be counted toward the corresponding degree.

Those courses accepted by most engineering schools are: English 1310, 1320; History 1310, 1320; Chemistry 1410, 1420; Industrial Arts 1413: Physical Education activities, two semester hours; English 2351, English literature (maximum of six hours); Physics 1430, 2420; Political Science 2310, 2320; Mathematics 2363 (or 2317), 2371, 2372, 3323, 3373, 3375; Computer Science 2308, 2318. An additional nine hours selected from the areas of Social and Behavioral Sciences, Humanities, Fine Arts, and Communication are also acceptable.

First semester freshmen are advised to earn credit in Mathematics 1315, 1317, and 2363 (or 2317) in the summer session immediately preceding the regular session in which they plan to enroll if their mathematics background is inadequate to enroll in Mathematics 2363. (See the catalog description for the proper prerequisites.) If this suggestion is not followed, the student program is usually delayed by at least one semester.

Students making a "D" grade in a technical course which serves as a prerequisite to another course in a sequence, are strongly urged to repeat the course.

The majority of engineering schools in Texas require a 2.0 or 2.5 grade-point average for the acceptance of transfer students.

**Adviser:** Contact Chairman, Department of Mathematics and Computer Science

**Law:** All accredited law schools in the state, The University of Texas, The University of Houston, St. Mary's University, Baylor University, Southern Methodist University, South Texas College, Texas Southern University, and Texas Tech University, require the following from applicants prior to admission: (1) a bachelor's degree, (2) above average grades, and (3) a satisfactory score on the Law School Admission Test (LSAT).

The Department of Political Science offers a Legal Studies Concentration to prepare students for law school (see page 236). Should a pre-law student elect not to major in political science, it is strongly recommended that as many of the following courses be taken during his or her junior and senior years as the major curriculum permits:
Speech Communication 2325, 3336, *4331
English 2330 or 2340, 3314, 3315
Accounting 2361, 2362
History 3315, 3316

*Political Science 3310, 3331, 4311, and 4361
Sociology 3343
*Philosophy 2330, 3331, and 3320

It is strongly suggested that the pre-law student regularly consult with his or her adviser, particularly during the first and last academic years. Such consultation is intended to facilitate the choice of Law School Admission Test.

Advisers: Dr. Randall W. Bland
Dr. Francis M. Rich, Jr.
Department of Political Science
Mr. Donald B. Harrelson
Department of Criminal Justice

Medicine: Medical schools recommend the appropriate baccalaureate degree for entrance. A suggested program which will satisfy the pre-medical requirements is as follows: Chemistry 1410, 1420, 2410, 2420, 3410, and 4465; Biology 1410, 1420, 2340, 2350, 3495, and one or more additional biology courses selected from the following: 3450, 3480, 3490, 4330, 4340; Physics 1410, 1420, (or 1430, 2420); English 1310, 1320, and six hours of sophomore literature; Mathematics 1315, 2321, 2331. Political Science 2310, 2320; History 1310, 1320; Physical Education activities, four semester hours. If a student anticipates a later application for the combination degree, he should include Philosophy 3201 (or 1305); Art, Theatre Arts, or Music 3213 (or 2300); Speech Communication 1310; and two semesters of a modern language. It should be noted that the above suggested program is more rigorous than the minimal courses required by most medical schools.

Adviser: Contact the Dean of the School of Science

Pharmacy: Pharmacy programs require five years of work of which two may be accomplished in this institution. The recommended local program, commensurate with The University of Texas and The University of Houston, consists of Biology 1410, 1420, 2430, 3440; Chemistry 1410, 1420, 2410, 2420; English 1310, 1320, and six semester hours of sophomore literature (for the University of Houston), or Speech Communication 2320 and English 2351 (for The University of Texas); Mathematics 2321, 2331 (for The University of Texas at Austin), or 1317 (for the University of Houston). (These mathematics courses can be preceded by 1315 if necessary.) History 1310, 1320; Physics 1410, 1420; Political Science 2310, 2320; and Economics 2310.

While the above is the minimum requirement, other suggested courses are Chemistry 3410, 4375, and Accounting 2361. The course requirements for the School of Pharmacy at Texas Tech University are being formulated. Consultation with the adviser is recommended both prior to and during the program.

Adviser: Contact the Chairman of the Department of Chemistry

Veterinary Medicine: At this time, Texas A&M University has the only College of Veterinary Medicine in the State of Texas. The two-year curriculum listed below will satisfy the pre-veterinarian requirements at Texas A&M University. Curricula for veterinary colleges elsewhere in the United States are very similar.

Chemistry 1410, 1420, 2410, 2420
Biology 1410, 1420
Physics 1410, 1420
Mathematics 1315, 2321, and 2331
Political Science 2310, 2320
History 1310, 1320, English 1310, 1320, and three semester hours of sophomore literature.

*Courses which should be given priority.
Physical Education activities, four semester hours.
Agriculture 1345 and 3325.
Agriculture 3301, or Biology 3352

Recommended electives include courses from agriculture, biology, economics, English, modern language, mathematics, psychology, aerospace studies (ROTC), sociology, and statistics.

The curriculum in pre-veterinary medicine is a two-year non-degree program. Enrollment in the pre-veterinary curriculum does not carry assurance that a student will be admitted to the College of Veterinary Medicine. Any student beginning a curriculum in pre-veterinary medicine should consider a program which would apply toward another major degree, should acceptance into a College of Veterinary Medicine not be granted. The professional curriculum in veterinary medicine begins only in the fall semester at Texas A&M University. Formal application, on a special form supplied by the Registrar, Texas A&M University, must be filed between December 15 and February 1 of the calendar year in which admission is sought. Accompanying the application forms must be two complete and official transcripts from each college or university the applicant has attended, including a record of courses in progress.

Each applicant must submit with the application, no later than February 1 of the calendar year in which admission is sought, scores for the aptitude test of the Graduate Record Examination. The test must be taken within five years of the date of application for admission to the professional curriculum in veterinary medicine.

The Graduate Record Examination will be given at various centers, including Texas A&M University, throughout the United States and in other countries. To determine the most convenient locations, prospective applicants should write to the Educational Testing Service, Box 955, Princeton, New Jersey, 08540; or The Academic Counseling Center, Texas A&M University, College Station, Texas, 77843.

Counseling for students who wish to qualify for the professional curriculum in veterinary medicine is available in the College of Veterinary Medicine regardless of the curriculum in which the student is registered. For an appointment please contact: Office of the Dean, College of Veterinary Medicine, Texas A&M University, College Station, Texas, 77843—(Telephone (713) 845-5051.)

Adviser: Dr. B. Michael Abel, D.V.M.
Department of Agriculture
School of Applied Arts

Robert D. Gratz, Ph.D., Dean

Aerospace Studies (ROTC) .... Arthur H. Schroder, Colonel, M.S., Chairman
Department of Agriculture .............. Roy V. Miller, Jr., Ph.D., Chairman
Department of Criminal Justice ....... Donald B. Harrelson, M.B.A., Chairman
Department of Home Economics ......... Mary W. Harp, Ph.D., Chairman
Department of Journalism ............... Roger E. Bennett, Ph.D., Chairman
Air Force Reserve Officer Training Corps

Professor: Colonel Arthur H. Schroder
Assistant Professors: Major James R. Langabeer,
Captain Lewis M. Glauner, Captain Woodrow W. Hopper, Jr.
Lecturer: J. R. Carter

The Air Force ROTC Program at Southwest Texas State University is designed to develop skills and attitudes vital to professional Air Force officers. The purpose of the program is to commission qualified male and female students who desire to serve in the United States Air Force.

Two routes to an Air Force Commission are available in Air Force ROTC at Southwest Texas State University. Entering students may enroll at the Four-Year Program, and students with at least two academic years remaining in college may apply for the Two-Year Program.

For the Four-Year Program, a formal application is not required for entering students. Registration is accomplished at the same time and in the same manner as for other college courses. During the freshman and sophomore years, students enroll in the General Military Course (GMC). They then may compete for entry into the Professional Officer Course (POC), which is outlined below and normally taken during the last two years of college. Membership in the GMC does not confer any military status or commitment upon the cadet. GMC contract cadets must successfully complete a course in English composition.

The Two-Year Program consists of the Professional Officer Course (POC), the last two years of the Four-Year Program. It is designed to provide greater flexibility to meet the needs of students desiring Air Force opportunities. The basic requirement is that the student have two academic years remaining at either the undergraduate or graduate level or a combination or both. Since the processing procedure should be completed well in advance of intended enrollment, students interested in the Two-Year Program should apply early in the fall term preceding the fall term in which they intend to enter the program. Application should be made in writing or by a personal visit to the Professor of Aerospace Studies. Upon completion of the six-weeks paid summer field training course, students entering the Two-Year Program may petition for credit by examination in Air Science 1110, 1120, 2110, 2120.
Selection into the Professional Officer Course (POC) in the Four-Year and Two-Year Programs is highly competitive and is based upon qualifications on an Air Force medical examination, scores achieved on the Air Force Officer Qualifying Test, ACT/SAT, and the recommendation of the Professor of Aerospace Studies. In addition, the Two-Year Program applicants must be approved by a board of Air Force officers. After successfully completing a paid summer field training course (four-weeks for the Four-Year Program and six-weeks for the Two Year Program) which is required prior to program entry, applicants meeting all requirements may then enroll in the Professional Officer Course. POC cadets who have not done so prior to this time must successfully complete a course in mathematical reasoning prior to commissioning.

Uniforms and Aerospace textbooks for both the GMC and the POC are provided without cost or deposit. Members of the Professional Officer Course receive $100.00 per month tax-free subsistence.

Scholarships are available on a competitive basis to students in the Four-Year and Two-Year Programs. Applications for four-year scholarships must be made by December 15 in the senior year of high school. Qualified students in the first and second years of the Air Force ROTC Program may apply during the spring semester for a scholarship for the remaining years in the program. The scholarships provide full tuition, laboratory and incidental fees, and allowance for books. In addition, scholarship students, regardless of classification, also receive the $100.00 per month tax-free subsistence referred to above. Complete scholarship information may be obtained by contacting Aerospace Studies (ROTC).

A Flight Instruction Program provides 25 hours of free flight instruction to each qualified senior pilot candidate.

Students who complete the Air Force ROTC Four-Year Program are required to present only two semester hours of physical education activities for graduation. This reduction does not apply to students in the Two-Year Program.

Students who complete at least three semester hours of credit in the junior and senior levels of Air Force ROTC work will not be required to take Political Science 2320.

Both General Military Course and Professional Officer Course members are required to attend a weekly one-hour laboratory each semester. The laboratory gives cadets a chance to learn and practice leadership skills.

Courses in Aerospace Studies

1110  General Military Course. (1-1) This course examines the development and growth of air power from a historical perspective starting before the first powered flights, continuing through World War I, the inter-war years, and World War II. It traces development of the various concepts for employment of air power and focuses upon factors which have prompted research and technological change. (F)

1120  General Military Course. (1-1) A continuation of 2110, beginning with the development of air power from World War II to the present. Various events and trends in the history of air power are examined, especially where these provide significant examples of the impact of air power on strategic thought. Contemporary defense strategy, concepts, and doctrine are emphasized. (S)

2110  General Military Course. (1-1) A study of the doctrine, mission, and organization of the United States Air Force; United States strategic offensive and defensive forces; their missions and functions; employment of nuclear weapons. (F)
2120 General Military Course. (1-1) Aerospace defense; missile defense; United States general purpose forces, and Aerospace support forces; the mission, resources, and operations of the tactical air forces, with special attention to limited war; review of Army, Navy, and Marine general purpose forces. (S)

3311 The Professional Officer. (3-1) A seminar course which examines management principles, functions, tools and problem solving. Throughout the course, students will learn and practice communication skills necessary as future junior officers in the United States Air Force. (F)

3312 The Professional Officer. (3-1) A seminar course pertaining to professionalism and leadership as applicable to the junior officer. Includes the meaning of professionalism and professional responsibilities. Includes study and practice in the use of Air Force communicative skills. (S)

4311 National Security Forces in Contemporary American Society. (3-1) This seminar course begins with a study of the military justice system, and the role and function of the professional military officer in a democratic society; followed with an examination of American defense policy formulation and implementation. Throughout the course, students will learn and practice communication skills necessary as future junior officers in the United States Air Force. (F)

4312 National Security Forces in Contemporary American Society. (3-1) This course is a continuation of 4311, with an extensive analysis of the various dynamics involved in defense policy making. Various institutional agencies are examined in light of their specific interests to defense policy; followed by a series of case studies involving weapons acquisition programs, technological innovation, doctrinal imperatives, and political factors. (S)

4321 Flight Instruction Academic. (3-0) Provides instruction necessary to pass the Federal Aviation Agency Written Examination in order to fulfill academic requirements for a private pilot's license. Includes instruction in: Aircraft Pre-Flight; Flight and System Controls; Federal Aviation Agency Regulations; Navigation; Weather; Weight and Balance; Radio Communications; and Airman Information Manual. (This course is not limited to Air Force ROTC students, but is restricted to juniors and seniors except by approval of the instructor.) See Education 4320.
Department of Agriculture

Roy V. Miller, Jr., Professor and Chairman
Professors: Elliott, Rydl, Shell
Associate Professors: Champagne, Helm, Knotts
Assistant Professors: Abel, Carson
Instructor: Spannagel
Lecturer: Maddox

Bachelor of Science in Agriculture Degree
(135 semester hours)
Agriculture Education

Adviser: Dr. Clifton Don Knotts

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First Semester
Agriculture 2373, and elect
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Chemistry 1410
English 2370
Mathematics 1315
Physical Education activity

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Junior Year

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### Bachelor of Science in Agriculture Degree (128 semester hours)

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<th>Senior Year</th>
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### Areas of Concentration

**Agriculture-Business**

Requirements: Agriculture 1333, 2313, 2367, 2379, 3317, 3325 (or 4325), 3351, 4330, 4383; Accounting 2361; Business Administration 3333, 3361; Marketing 3343; Economics 2310, elect three advanced hours; Computer Science 1308; Sociology 2310.

**Animal Science**

Requirements: Agriculture 1333, 2313, 2367, 2374, 3301, 3314, 3317 (or 3351), 3321, 3325, 3331, 3345, 3401, 4325; Biology 2440 (or 3440); Chemistry 2130, 2330, 2450.

* Determined by area of concentration. Chemistry 1420 is a prerequisite to Chemistry 2130, 2330, and 2450.
Plant and Soil Science
Requirements: Agriculture 2313, 2321, 2374, 2379, 3301, 3304, 3317 (or 3351), 3354, 3377 (or 4303), 3401, 4315, 4426; Biology 3365 (or 3440); Chemistry 2130, 2330, 2450 (or 3410).

Production and Management
Requirements: Agriculture 1333, 2313, 2321, 2367, 2374, 2379, 3301, 3317, 3321, 3351, 3354, 3375, 3401, 3473, 4325, 4361, 4374.

Range Management
Requirements: Agriculture 2313 (or 2379), 2321, 3317 (or 3351), 3321, 3331 (or 3314), 3345, 3354, 3401, 3415, 4321, 4426; Biology 3360, 3365, 4454; Chemistry 2130, 2330.

Horticulture Science
Requirements: Agriculture 2313, 2374, 2379, 3301, 3304, 3317 (or 3351), 3354, 3377, 3379, 4300, 4301, 4302, 4303, 4315; Biology 3360, 3365; Chemistry 2130, 2330.

Agriculture Mechanization
Requirements: Agriculture, six advanced hours Plant Science, six advanced hours Animal Science, 2313 (or 2379), 2374, 3317 (or 3351), 3353, 3354, 3375, 3473, 4361, 4374; Physics 1410, 1420; Industrial Arts 2330.

Agriculture Journalism
Requirements: Agriculture 2313, 2379, 3317, 3321, 3325 (or 4325), 3351, 4383; Journalism 1313, 1374, 1450, 3310, 3312, 3323, 3343, 3368, 3383, 4301.

For curriculum in Pre-Veterinary Medicine, see Pre-Professional Curriculum on page 58-59.

Courses in Agricultural Education
1310 Careers in Agri-Business and Industry. (3-0) Career information and opportunities in Agricultural World of Work will be emphasized. Qualification and employment opportunities in Texas will be stressed.

3205 Principles of Agricultural Education. (2-0) The principles and aims of vocational education in the agricultural industry. Emphasis also on teacher competencies, leadership training, professional ethics, and organizations. (F)

4211 The Vocational Agriculture Teacher's Problems. (2-0) Classroom management, daily lesson planning, teaching techniques, teacher reports and records, care and use of teaching aids, and evaluation of activities in a complete program of vocational agriculture. (S)

4212 Program Planning. (2-0) Program building to meet the needs of the agricultural industry in the local community, preparation of teaching units, and the study of effective teaching methods. (F)

4681 Directed Teaching (Vocational-Agriculture). One-half of one semester of off-campus supervised student teaching in the Vocational Agriculture Program in selected schools in Texas.
Prerequisite: Senior classification.

Courses in Agricultural Engineering
2373 Farm Shop I. (1-4) Identification, selection, care and uses of hand tools and power tools. Basic skills in agricultural construction with special areas of concentration: sketches, plans and drawings; tool fitting; farm carpentry; plumbing; farm masonry; painting and farm fences.

2374 Farm Shop II. (1-4) Basic agriculture welding processes and selection, servicing and maintaining agriculture power units including small engine overhaul. The welding processes will include arc welding, hard surfacing, oxy-acety-
lack welding, brazing and cutting. (This course is a prerequisite to Agriculture 3375, 3473 and 3474.)

3353 Farm Structure and Environment. (2-2) Determining farm building requirements, materials, design, and construction. Includes structural systems, design loads, environmental controls, heat loss from buildings, ventilation requirements, waste disposal systems, and feed handling facilities and equipment.
Prerequisite: Agriculture 2373.

3354 Agricultural Surveying. (1-4) Principles of engineering practices as applied to soil and water conservation, including elementary surveying, runoff, terracing, water control structures, farm reservoirs, and surface drainage.

3375 Farm Machinery and Equipment. (1-4) The use, operation, care, selection, servicing, and adjusting the principle tillage, planting, cultivation, and harvesting machines. Emphasis will be placed on design and construction of farm equipment and labor saving devices. (F)
Prerequisite: Agriculture 2373 and 2374.

3473 Farm Power. (2-4) Repair and reconditioning of major farm tractor and power units used in agriculture. Laboratory portion of course will consist of the complete overhaul of a farm power unit. (S)
Prerequisite: Agriculture 2373, 2374, and 3375.

4343 Organization of Agricultural Mechanics. (3-0) Development of appropriate curriculum materials, teaching aids, technical exhibits, and teaching methods for agricultural mechanics programs. Selection of reference material and the evaluation of agricultural mechanics programs. Planning considerations for agricultural mechanics facilities and equipment. Agricultural mechanic program management functions such as equipment selection, purchasing, maintenance, shop budgets, inventories, and supply needs. Also layouts of tool storage and construction of auxiliary shop equipment are to be studied.
Prerequisite: Agriculture 2373.

4361 Rural Electrification. (2-2) The fundamentals of electric current generators and transmission, farm application, electric heating, lighting and power, wiring motors, power rates, meter reading, safety rules and regulations.

4374 Advanced Farm Welding and Construction. (1-4) Advanced techniques in arc, oxyacetylene TIG and MIG welding. The utilization and application of agricultural mechanics methods, practices and skills in the design and construction of advanced projects for farm and ranch use.
Prerequisite: Agriculture 2373 and 2374.

Courses in Agricultural Economics

2383 Introduction to Agricultural Economics. (3-0) The role of agriculture in the general economy, and recognized changes in technology, institutions, and policies which have altered the structure of farming and agri-business.

3317 Farm Management. (3-0) Tools and techniques which are basic to the study of farm organization and decision-making, the wise allocation of the factors of production, the keeping of records, and income tax management.

3351 Agricultural Marketing. (3-0) A study of the food marketing system; includes the functional, institutional and commodity approach, the area of demand creation and the special organization of channel integration and bargaining power.

4383 Land Economics. (3-0) Economic concepts and institutional factors relating to utilization of land, water, forests, space — emphasizes tenure, appraisal, taxation, zoning, and agrarian adjustments.
Courses in Animal Science

1333 Farm Poultry. (2-2) A general course in poultry, including types, breeds, poultry houses and construction, breeding, feeding, incubation and brooding, culling, diseases and parasites.

1345 Animal Husbandry. (2-2) An introductory course designed to acquaint students with the importance of the livestock industry. A study of the types and breeds; market classes and grades of such animals as beef cattle, swine, goats, horses and sheep; attention will be given to breeding, judging, care, and management.

2345 Horse Management. (2-2) A course designed as a broad but thorough coverage of most areas of horse husbandry and production, including anatomy, physiology, breeding, feeding, training, and health care. Laboratory sessions are designed to acquaint the student with modern methods of breeding, training, and care of the horse.


3301 Genetics of Livestock and Plant Improvement. (3-0) Fundamental principles of genetics and their application to higher plants and animals. The physical basis of Mendelian inheritance, expression and interaction of genes, gene frequency, linkage, sex linkage, inbreeding, linebreeding, and crossbreeding as applied to selection indices for livestock and plants.

3314 Preventive Veterinary Medicine. (3-0) A course designed to enable the animal science student to understand basic veterinary principles as applied to prevention of disease in domestic livestock. Common diseases of livestock are considered, with emphasis on sanitation and modern preventive methods concerned with keeping livestock healthy.

3325 Animal Nutrition. (3-0) General chemical composition of feedstuffs and animals; digestion, absorption, metabolism and function of nutrients; estimation of feedstuff nutritive value; requirements of animals, and formulation of rations.

3331 Reproduction in Farm Animals. (2-2) An examination of the anatomy and physiology of reproductive systems of livestock of economic importance. Attention is given to reproductive failure and disease. The laboratory includes pregnancy testing, semen collection and evaluation, artificial insemination techniques and evaluation of breeding records.

3345 Advanced Animal Husbandry. (2-2) Problems in all phases of animal husbandry, pertaining to beef cattle, sheep, goats, swine, and horses. (S)

4114 Seminar in Animal Science. (1-0) Important current developments in animal science and related topics. Review of literature and presentation of papers on selected topics.

4325 Feeds and Feeding. (2-2) Study of feedstuffs used in livestock enterprises. Application of basic nutrients to the needs of different species of livestock. Formulating rations, methods of feeding, feed control laws, and feeding investigation.

4330 Food Technology: Processing Meats. (2-2) Evaluation and grading of carcasses; wholesale and retail cuts of beef, pork, lamb, and poultry. Emphasis on quality controls, testing of finished products that have been frozen, cured, dried, pickled, and canned.
Courses in Plant and Soil Science

2313 Agronomic Crops. (2-2) A study of the production, harvest practices, storage, and use of cereal and feed grains, fiber crops, forages, and other related crops requiring special technology.

2321 Agrostology. (2-2) A study of grasses. Identification of the genera and species of economic importance in Texas. Attention to the economic value of the various grasses and their ecological significance, and to the distribution, propagation, and management of grasses. (F)

2379 General Horticulture. (2-2) A survey of the general field of horticulture; a study of the principles and practices of propagation; the growth and fruiting habits of horticultural plants; and the culture, harvesting, handling, and utilization of fruits.

3304 Propagation of Horticultural Plants. (2-2) Study of principles and practices of propagating ornamental plants, vegetables, and fruits by sexual and asexual methods of handling and germinating seed; starting plants by cuttings, layers, bulbs and other plant structures, buds and grafts; physical physiological and environmental factors affecting starting plants from seed and vegetatively.

3321 Range Management. (3-0) Practical problems met in managing native pastures and range lands. Attention to determining range condition and proper stocking rates, methods of handling livestock on the range, range reseeding, brush control and poisonous plants. The ecological and physiological response of range vegetation to grazing. (F)

3377 Turfgrass Management. (2-2) Kinds of turf grasses; practices and principles of their management for athletic fields, playground areas, golf courses, home lawns, etc.

3379 Floriculture for the Home. (2-2) Selection, production, and care of ornamental plants for potting and use in the homes. Trees, shrubs, grasses, and other perennials and annuals suitable for landscaping home grounds.

3401 Soil Management. (3-2) Management of soils as pertaining to soil and water conservation, plant-soil-water relationships, special saline and sodic problems, and cropping systems.
Prerequisite: Agriculture 3426.

3426 Soil Science. (3-2) The fundamental principles of soil science to acquaint the student with some physical, chemical, and biological properties of the soil. (F)
Prerequisite: Chemistry 1410, 1420.

4115 Seminar in Plant Sciences. (1-0) Important current developments in plant science and related topics. Review of current literature and presentation of papers on selected topics.

4300 Greenhouse and Nursery Management. (2-2) Planning greenhouses for commercial and home use; plant-nursery layouts. Study physical and economical factors affecting the production of plants in the greenhouse and other forcing structures, and in the field; management techniques used in the production and marketing of greenhouse and nursery plants.

4301 Landscape Design and Maintenance. (2-2) Developing a landscape plan for the home and specific public areas. Identification, growth characteristics, selection and use, and maintenance of plants in the landscape. Use and maintenance of plants in the home and public buildings.

4302 Fruit and Vegetable Crop Production. (2-2) Factors influencing small-fruit, and tree-fruit, and vegetable crop production in the field including rootstocks, varieties, soil, planting, transplanting, irrigating, fertilizing, pruning, in-
sects, diseases, nematodes, weeds, chemicals, harvesting, storing and marketing; greenhouse production of certain vegetables.

4303 Diseases of Horticultural Plants. (2-2) Study of major pathogenic (caused by fungi, bacteria and viruses) and non-pathogenic (caused by nutrient deficiencies and environment) diseases of ornamental plants including such pests as insects, nematodes, and weeds; preventive measures and proper handling of pesticides used in control of these pests with emphasis on biological control.

4315-5315 Fertilizers and Soil Productivity. (2-2) The principles of fertilizer use for maintenance of soil productivity. Fundamentals of crop producing powers of soils will be discussed, as well as proper fertilizer use to secure maximum economic yields. Also, the technology of fertilizer preparation and proper application for greater economic returns. Restricted to those who have had Agriculture 3426 and preferably are second semester juniors or seniors.

4320 Food Technology: Processing Fruits and Vegetables. (1-4) Study of principles and practices of thermal processing, quick freezing, dehydration and other techniques of food preservation. Emphasis on quality controls and evaluation of consumer products.

4321-5321 Advanced Range Management. (2-2) Advanced problems in range management such as range and ranch economics, control, and proper stocking. (S)

4385 Special Problems in Technical Agriculture. (3-0) A course for advanced undergraduates to study subject matter not included in established courses. Problems in agronomy, economics, animal science, plant science, and farm mechanics may be selected. Course may not be taken for graduate credit.

Prerequisite: Senior classification and approval of departmental chairman.

4426-5426 Classification and Management of Range Soils. (3-2) Classification and management of range soils in Texas. The physical relationships of soil moisture, temperature, penetrability, and aeration to plant growth. Range condition classes, range sites, land classes, and problem areas as they affect management. (S)

Courses in Related Agriculture Science

3329 Economic Entomology. (2-2) A study of the most common insects of field crops, fruits, vegetables and farm animals; life history, methods of attack, damage, and means of combating. Collection and mounts of insects will be made; insecticides will be mixed and applied for controlling insects.

4347-5347 Conservation of the Natural Agricultural Resources. (3-0) A study of resources related to farm and community life, special emphasis on the conservation of soil, water, forest, range land, wildlife, minerals, health, and safety. Visiting consultants in the above fields will be used.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
The Department of Criminal Justice offers courses leading to a Bachelor of Science degree in Criminal Justice with areas of concentration in law enforcement and corrections.

The purpose of this degree program is to prepare the student to serve the community in positions of responsibility in the management of law enforcement agencies and other criminal justice agencies. The theory of criminal justice is emphasized. This is not a training program, but rather a general education in the maintenance of social order in a democratic society.

Students seeking a degree in criminal justice should insure that they are qualified to meet the demanding standards that such a career will require. The vast majority of criminal justice agencies require at least the following in personal characteristics:
1. Emotional stability and self-control.
2. Physical qualifications — The following will usually disqualify an individual for employment in a criminal justice agency:
   Abnormal weight
   Poor eyesight
   Record of serious illness or injury
   Physical defects or deformities
   Record of mental illness
3. Evidence of good moral character (no criminal record or excessive traffic offenses).

Bachelor of Science in Criminal Justice Degree
(128 semester hours)

Academic Foundations requirements:

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<tr>
<th>Requirement</th>
<th>Hours</th>
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<tr>
<td>English 1310, 1320, and three hours of literature</td>
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<td>*Biological Science, Physical Science, Mathematics, or Modern Language</td>
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<td>Speech Communication 2320 or Computer Science 1308</td>
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<td>Sociology 3325</td>
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49-51

*Must include work in at least two areas. For example: Two mathematics courses and two biology courses.
Criminal Justice
**Professional Core:**
- Criminal Justice 1310, *Introduction to Criminal Justice.* 3
- Criminal Justice 2310, *Police Organization and Administration.* 3
- Criminal Justice 2411, *Legal Aspects of Law Enforcement.* 4
- Criminal Justice 2324, *Police Role in Crime and Delinquency.* 3
- Criminal Justice 2330, *Criminal Investigation.* 3
- Criminal Justice 2350, *Evidence and Criminal Procedure.* 3
- Criminal Justice 2370, *Police-Community Relations.* 3
- Criminal Justice 4410-4420, *Internship I and II.* 8

<table>
<thead>
<tr>
<th>Area of Concentration</th>
<th>Free Electives (minor if desired)</th>
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**Total** 128

Completion of these degree requirements will make the student academically qualified for the basic law enforcement officer certification from the State of Texas.

**Areas of Concentration**

The student may choose his area of concentration from the following alternatives:

**Law Enforcement**

Political Science 3311 and 3314 or 3316 or Criminal Justice 4332; Psychology 3319 or Sociology 3319; Sociology 3343; Criminal Justice 4350; Criminal Justice, six semester hours advanced electives.

**Corrections**

Psychology 3315, 3319; Sociology 3327, 3347; Criminal Justice 3325, 3326; Criminal Justice, three semester hours advanced electives.

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<th>Freshman Year</th>
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<td>Hours</td>
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<td>English (literature)</td>
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<th>Junior Year</th>
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</table>

Completion of these degree requirements will make the student academically qualified for the basic law enforcement officer certification from the State of Texas.
Courses in Criminal Justice

1310 Introduction to Criminal Justice. (3-0) Survey of the general philosophy and historical background of the American Criminal Justice System, emphasizing agencies and processes.
Prerequisite: Criminal Justice 1310 is a prerequisite for all other criminal justice courses except Criminal Justice 3325, 3326, 4312, 4313, and 4362.

2310 Police Organization and Administration. (3-0) Principles of organization and management as applied to law enforcement agencies; introduction to concepts of organizational behavior.

2324 Police Role in Crime and Delinquency. (3-0) Study of deviant behavior and current criminological theories, with emphasis on police applications, crime prevention, and the phenomena of crime as it relates to juveniles.

2330 Criminal Investigation. (2-2) Introduction to the fundamentals of criminal investigation, including theory and history, conduct at crime scenes, collection and preservation of evidence.

2350 Evidence and Criminal Procedure. (3-0) Rules of evidence, with particular import at the operational level of law enforcement; analysis of criminal procedure in such important areas as arrest, force, and search and seizure. Criminal court organization and procedures.

2370 Police-Community Relations. (3-0) The role of the individual officer in achieving and maintaining positive public response; inter-group relations and public information.

2411 Legal Aspects of Law Enforcement. (3-1) A study of the history and philosophy of criminal law, including the definition and application of the provisions of the Texas Penal Code and other Texas Penal Statutes; the practical use of legal research tools and the functioning of the Texas and Federal court systems are studied in the laboratory.

3323 Supervision. (3-0) A study of first-line supervision in the field, with emphasis on leadership, morale, discipline, motivation, communication, and decision-making. An examination of complaints, grievances, and performance ratings.

3325 Penology. (3-0) An examination of the total institution, analysis and evaluation of the contemporary correctional systems; a study of rehabilitation and inmate change in prison.

3326 Probation and Parole. (3-0) A study of the development, organization, and operation of probation and parole in the rehabilitation process.

3342 Police Traffic Planning and Management. (3-0) A study of the police traffic role to include normal police traffic functions and services and to examine traffic patterns with emphasis upon planning traffic movement in response to emergency contingencies. The course will explore the following areas: (1) theory of traffic control, (2) traffic safety procedures, (3) accident data analysis, (4) organization, reports, and records, (5) traffic generators, origin and destination, (6) traffic engineering and control techniques, (7) emergency contingencies planning, (8) research and development.

3351 Crime Prevention. (3-0) A study of the prevention of crime through cooperative ventures between law enforcement agencies and the communities they serve. Emphasizes the prevention of crimes against property both in businesses and in the home. Includes history of crime prevention, physical security measures, special problems in loss control, and security survey procedures.

4311 Seminar in Special Law Enforcement Problems. (3-0) A study of the various areas and phases of administration, management, and organization of law enforcement agencies.
4312 Industrial and Commercial Security. (3-0) An analysis and evaluation of the organization, operation and development of security measures used by industry, retail stores, and private police agencies; an examination of physical security systems, industrial fire security systems, and personnel security.

4313 State and National Security. (3-0) An analysis of the various threats to state and national security and study of law enforcement agencies organized to meet the overall threat.

4315 Seminar in Special Problems Corrections. (3-0) An in-depth study of problems in administration, management, and organization of agencies involved in corrections. Includes special problems in probation, parole, and correctional institutions.

4320 Current Vice and Narcotic Enforcement Problems. (3-0) A study of the impact of vice and narcotics as social and economic problems; special attention is focused on the role of organized crime in these areas of criminal law violation. The impact of certain narcotics on society and the individual is addressed.

4332 Municipal Police Administration. (3-0) The identity of behavioral theories and their application to the administration of a municipal police department. Strong emphasis is placed on the current environmental demands when bridging the gap between theory and practical application. Specific concerns include policy development, budgeting, personnel administration with a special focus on training and communication.

Prerequisite: Criminal Justice 1310 and 2310.

4350 Contemporary Legal Issues in Law Enforcement. (3-0) An in-depth study of recent developments in constitutional law and criminal law. Their effects upon the law enforcement officer in society will be given special attention. Includes specific case studies with emphasis on analyzing factual situations and legal issues.

Prerequisite: Criminal Justice 1310 and 2411.

4362 Readings in Criminal Justice. (3-0) Institutes designed for continued professional training and education of employees of criminal justice agencies, teachers, juvenile officers, court employees, mental health officers, corrections personnel and other individuals and groups interested in the problems of crime and law enforcement.

4410-4420 Internship I and II. (0-8) Depending upon the student's major interest, field service training is provided with federal, state, and local enforcement agencies; private and public crime laboratories; commercial, industrial, and financial organizations with security programs; private and public agencies working in crime and delinquency prevention; correctional activities; public and private organizations engaged in highway safety. The internship is a field program designed to provide observation and actual work experience in the various agencies in which a student is assigned.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
Department of Home Economics

Mary Wanda Harp, Professor and Chairman
Associate Professors: Fisher, *N.B. Moore
Assistant Professors: J.L. Allen, R. A. Anderson, Manford, Stalnaker
Instructors: Albrecht, T. R. Allen, Bollinger, Foster, Foulds, Holmes, McMinn, Poschman, Robenstine, Roman, Scheel, Truitt, C. C. Williams
Lecturer: Baughn

Bachelor of Science in Home Economics Degree
(128 semester hours; includes certificate)

The Department of Home Economics offers work leading to a Bachelor of Science degree in Home Economics with the following six concentrations:

Vocational Home Economics Education —

Secondary: Certificate coded 164
Kindergarten: Endorsement may be added to Certificate 164 with completion of Education 4311, 4329, 4330, and 4387.

Child Development
Fashion Merchandising
General Home Economics — No certificate
Interior Design — Affiliated with American Society of Interior Designers
Nutrition — Meets American Dietetic Association academic requirements

General Requirements

Academic Foundations
Foundation courses in humanities and social and natural sciences, including the uniform requirements of the University (approximately 56 semester hours).

Professional Home Economics Core

A. Courses common to all concentrations and the only core courses required in Home Economics Education:
   3. Home Economics 1350, Design and Color.

B. Courses selected on basis of concentration:
   1. Home Economics 2310, 3310, 3317, 4150, 4317, 4318, Child Development.

Additional Course Requirements
Required and elective courses as specified in major degree programs to complete the 128-130 semester hours for graduation. The various concentrations meeting degree requirements are described by charts listing specific course requirements.

*Acting Chairman of the Department of Home Economics, Spring, 1980.
# Home Economics Education

**Basic Curriculum**

<table>
<thead>
<tr>
<th>Freshman Year</th>
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<tbody>
<tr>
<td><strong>English</strong> 1310, 1320</td>
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<tr>
<td><strong>Chemistry</strong> 1410</td>
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<tr>
<td><strong>Mathematics</strong> 1311 (or 1315)</td>
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<td><strong>Speech Communication</strong> 1310</td>
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<tr>
<td><strong>Home Economics</strong> 1310, 1350, 1352</td>
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<td><strong>Physical Education activity, 2 hours</strong></td>
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<table>
<thead>
<tr>
<th>Sophomore Year</th>
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<tbody>
<tr>
<td><strong>English</strong> 2330 or 2370</td>
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<tr>
<td><strong>English</strong> 2340 or 2380</td>
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<tr>
<td><strong>History</strong> 1310, 1320</td>
</tr>
<tr>
<td><strong>Chemistry</strong> 1430</td>
</tr>
<tr>
<td><strong>Biology</strong> 2430</td>
</tr>
<tr>
<td><strong>Political Science</strong> 2310, 2320</td>
</tr>
<tr>
<td><strong>Physical Education activity, 2 hours</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sociology or Psychology, 3 hours</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Philosophy</strong> 3201 (or 1305)</td>
</tr>
<tr>
<td><strong>Art, Theatre Arts, or Music</strong> 3213 (or 2300)</td>
</tr>
<tr>
<td><strong>Foundation elective, 3 hours</strong></td>
</tr>
</tbody>
</table>

**Totals including Basic Curriculum**

- Freshman Year: 128 hours
- Sophomore Year: 134 hours

---

## Child Development Concentration

**Basic Curriculum**

<table>
<thead>
<tr>
<th>Freshman Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong> 1310, 1320</td>
</tr>
<tr>
<td><strong>Science, Mathematics, or Modern Language, 6-8 hours</strong></td>
</tr>
<tr>
<td><strong>History</strong> 1310, 1320</td>
</tr>
<tr>
<td><strong>Home Economics</strong> 1310, 1350, 1352, 2310</td>
</tr>
<tr>
<td><strong>Physical Education activity, 2 hours</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Political Science</strong> 2310, 2320</td>
</tr>
<tr>
<td><strong>Speech Communication</strong> 1310</td>
</tr>
<tr>
<td><strong>Science, Mathematics, or Modern Language, 6-8 hours</strong></td>
</tr>
<tr>
<td><strong>Physical Education activity, 2 hours</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English (literature), 6 hours</strong></td>
</tr>
<tr>
<td><strong>Psychology</strong> 2310</td>
</tr>
<tr>
<td><strong>Art, Theatre Arts, or Music</strong> 3213 (or 2300)</td>
</tr>
<tr>
<td><strong>Philosophy</strong> 3201 (or 1305)</td>
</tr>
</tbody>
</table>

---

*Required Academic Foundations and Home Economics Core Courses.*
**Senior Year**

<table>
<thead>
<tr>
<th>Academic Foundations elective, 5-6 hours</th>
<th>Home Economics 4150, 4317, 4350, 4364</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education 4303, 4311, 4329, 4330</td>
<td>Electives (advanced), 9 hours</td>
</tr>
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Total including Basic Curriculum

**Fashion Merchandising Concentration**

<table>
<thead>
<tr>
<th>Requirements for Major Concentration</th>
<th>Requirements for Major Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) No Minor</td>
<td>(2) Minor in Business Administration</td>
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<td>(3) Minor in Art</td>
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**Freshman Year**

<table>
<thead>
<tr>
<th>Basic Curriculum</th>
<th>Home Economics 1346, 2340</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Economics 1310, 1320, 1350, 1352</td>
<td>Home Economics 1346, 2340</td>
</tr>
<tr>
<td>English 1310, 1320</td>
<td>Home Economics 1346, 2340</td>
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<tr>
<td>Science, Mathematics, Modern Language, 6-8 hours</td>
<td>Home Economics 1346, 2340</td>
</tr>
<tr>
<td>Physical Education activity, 2 hours</td>
<td>Home Economics 1346, 2340</td>
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</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>English (literature), 6 hours</th>
<th>Home Economics 3340, 3347</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech</td>
<td>Art 1354</td>
</tr>
<tr>
<td>Communication 1310 or 2320</td>
<td>Accounting 2361</td>
</tr>
<tr>
<td>Science, Mathematics, Modern Language, 4-6 hours</td>
<td>Economics 2310</td>
</tr>
<tr>
<td>Physical Education activity, 2 hours</td>
<td>Journalism 3310, 3323, 3367 or 3368</td>
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**Junior Year**

<table>
<thead>
<tr>
<th>Home Economics 3337</th>
<th>Home Economics 4340</th>
</tr>
</thead>
<tbody>
<tr>
<td>History 1310, 1320</td>
<td>Marketing 3343</td>
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<tr>
<td>Political Science 2310, 2320</td>
<td></td>
</tr>
<tr>
<td>Art, Theatre Arts or Music 3213 (or 2300)</td>
<td></td>
</tr>
<tr>
<td>Philosophy 3201 (or 1305)</td>
<td></td>
</tr>
<tr>
<td>(1) Foundation electives, 6 hours</td>
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<tr>
<td>(2) Business Administration 3361</td>
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<tr>
<td>(3) Art 3111</td>
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**Senior Year**

<table>
<thead>
<tr>
<th>Home Economics 4348, 4365</th>
<th>Home Economics 4350</th>
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</thead>
<tbody>
<tr>
<td>(1) No minor, 3 hours</td>
<td>Art 3337 (or 4337) or Theatre Arts 3344 (or 3345)</td>
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<tr>
<td>Foundation electives</td>
<td>Free electives, 9-12 hours</td>
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<tr>
<td>(2) Business Administration minor, 6 hours</td>
<td>Computer Information Systems 2320</td>
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<tr>
<td>Foundation electives</td>
<td>Management 3303 (or Marketing 3357)</td>
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</table>

<table>
<thead>
<tr>
<th>Home Economics 4350</th>
<th>Home Economics 4350</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management 303, Marketing 3357, electives, 3 hours</td>
<td>Art 3337, elective, 3 hours, 4311</td>
</tr>
<tr>
<td>Computer Information Systems 2320 or Management 3303 or Marketing 3357</td>
<td>Art 4337, elective, 3 hours, 4311</td>
</tr>
<tr>
<td>Journalism 3310, 3323, 3367, or 3368</td>
<td>Journalism 3367 or 3310 or 3323 or 3368</td>
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<tr>
<td>Economics 2310</td>
<td>Economics 2310</td>
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</tbody>
</table>

Totals including Basic Curriculum

| 128 hours | 128 hours |

*Required Academic Foundations and Home Economics Core Courses.*
General Home Economics

*Basic Curriculum

**Freshman Year**
- English 1310, 1320
- Science, Mathematics, or Modern Language, 4 hours
- Speech Communication 1310
- Home Economics 1310, 1350, 1352
- Physical Education activity, 2 hours

**Sophomore Year**
- English (literature), 6 hours
- History 1310, 1320
- Science, Mathematics, Modern Language, 4 hours
- Sociology, 3 hours
- Physical Education activity, 2 hours

**Junior Year**
- Science, Mathematics, Modern Language, 4 hours
- Political Science 2310, 2320
- Psychology, 3 hours
- Philosophy 3201 (or 1305)
- Art, Theatre Arts, or Music 3213 (or 2300)

**Senior Year**
- Home Economics 4326, 4364
- Electives (advanced), 15 hours
- Electives (free), 9 hours
- 128 hours

Minor Optional

Food and Nutrition Concentration

*Basic Curriculum

**Freshman Year**
- English 1310, 1320
- Mathematics 1315
- Chemistry 1410, 1420, 2130, 2330
- Home Economics 1310, 1350, 1352
- Physical Education activity, 2 hours

**Sophomore Year**
- English 2310, 2330, or 2370
- English 2320, 2340 or 2380
- Art, Theatre Arts or Music 3213 (or 2300)
- History 1310, 1320
- Chemistry 2450
- Physical Education activity, 2 hours
- Psychology 2310
- Biology 2440
- Sociology 2310

**Junior Year**
- Accounting 2361
- Home Economics 3320, 3328, 3336, 3338
- Elective (advanced), 3 hours
- Economics 2310

**Senior Year**
- Computer Information Systems 2320
- Management 3303, 4373 (or 4375)
- Home Economics 4334, 4338, 4348, 4365 131 hours

- Required Academic Foundations and Home Economics Core Courses.
## Interior Design Concentration

<table>
<thead>
<tr>
<th><em>Basic Curriculum</em></th>
<th>Requirements for Major Concentration</th>
<th>Requirements for Major Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Freshman Year</td>
<td>Sophomore Year</td>
</tr>
<tr>
<td></td>
<td>English 1310, 1320</td>
<td>Art 1321, 1354, 2370</td>
</tr>
<tr>
<td></td>
<td>Science, Mathematics, or Modern Language, 4 hours</td>
<td>Home Economics 2363</td>
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<tr>
<td></td>
<td>Home Economics 1310, 1350, 1352</td>
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<tr>
<td></td>
<td>Physical Education activity, 2 hours</td>
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<tr>
<td></td>
<td>English 2310, 2330, or 2370</td>
<td>Art 1321, (or 3327), 3337 or 4337</td>
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<td></td>
<td>English 2320, 2340, or 2380</td>
<td>Foundation elective, 3 hours</td>
</tr>
<tr>
<td></td>
<td>History 1310, 1320</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art 3213 (or Art 2300)</td>
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<td>Home Economics 1320, 4365</td>
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</tr>
<tr>
<td></td>
<td>Physical Education activity, 1 hour</td>
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</tr>
<tr>
<td></td>
<td>Science, Mathematics, or Modern Language, 8 hours</td>
<td>Home Economics 3365, 3366</td>
</tr>
<tr>
<td></td>
<td>Speech Communication 2320</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philosophy 3201 (or 1305)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Home Economics 4348</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical Education activity, 1 hour</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Political Science 2310, 2320</td>
<td>Home Economics 4350, 4366 (repeat</td>
</tr>
<tr>
<td></td>
<td>Home Economics 3337</td>
<td>once)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Art 2383, 3365, elective, 3 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Business electives, 6 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Totals including Basic Curriculum**

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>131 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophomore Year</td>
<td>131 hours</td>
</tr>
</tbody>
</table>

### Minor in Home Economics

Any person seeking a Bachelor's degree and not earning a teaching certificate, may minor in home economics. Such a minor consists of 18 semester hours, of which six are advanced.

### Courses in Home Economics

Many of the subject-matter courses in home economics are open to non-majors as electives.

**1110 Child Development I.** (0-2) Required observation in the Child Development Center.

**1310 The Young Child.** (3-1) Fundamental principles underlying development and behavior of the pre-school child and methods of guidance; study of the child as a family member; observation in pre-school centers.

**1320 Consumer Economics.** (3-0) Selection, use, and care of consumer goods; evaluation of buying practices; advertising, and labeling; study of available consumer services.

*Required Academic Foundations and Home Economics Core Courses.

**May be repeated once with different emphasis for additional credit.*
1325 **Home Management.** (3-1) Identification of goals and values; the management process and its use by individuals and families as a means to attain goals. Study of decision-making; work simplification, application of home management to current student problems.

1330 **Basic Foods.** (2-2) Scientific principles underlying the selection, preparation, preservation, and storage foods.

1346 **Textiles.** (2-2) A comprehensive study of the relationship of fiber, fabric and end-uses in clothing and home furnishings.

1350 **Design and Color.** (3-0) Principles of design and color as applied to the individual and his environment.

1352 **Foundations of Home Economics.** (3-0) History and philosophy of home economics; personal and professional orientation.

2310 **Infant Development.** (3-2) A study of the growth and development of the child from conception through toddlerhood. Practical application of principles of infant and toddler development and guidance through the observation and participation in infant and toddler laboratories and/or in the home. Emphasis on research findings related to prenatal, infant, and toddler development.

2332 **Meal Management.** (2-2) Management principles applied to planning, marketing, preparing, and serving of nutritious and attractive meals. Selection, use, and care of table appointments.

2335 **Nutrition.** (3-0) Fundamental principles governing normal nutrition; importance of food in promoting growth and maintaining health.

2340 **Basic Clothing.** (2-2) A study of the cultural, social, psychological and economic factors which have influenced and presently affect dress and dress practices with particular emphasis on present-day dress in America.

2362 **History of Furnishings.** (3-0) A survey of historical styles of furnishings and interiors. Egyptian to the 20th century.

2363 **Professional Interior Design.** (2-2) An introductory course for interior design majors. Development of interior space/form comprehension based on research, analysis, and proposed solutions. The study of major interior elements, materials, and activities.

Prerequisite: Home Economics 1350 and Industrial Arts 1413.

*3213 **Child Development II.** (0-4) Required observation and participation in the Child and Family Creative Learnings and Development Center.

3310 **Parent Education.** (3-0) Study of major objectives in parent-child relationships, child-rearing practices and factors influencing parental practices, evaluations of guidance principles and study of programs and agencies in parent education.

3313 **Child Development.** (3-2) Development of the total child from prenatal development through adolescence. Emphasis on family responsibility in promoting development; observation and participation in Child and Family Center.

3315 **Marriage and The Family.** (3-0) Universality and uniqueness of families; rational choices based on research studies in courtship, marriage adjustment, and interpersonal relations within families.

3317 **Home Nursing-Prenatal Care.** (3-0) Responsibilities of the family in maintaining health for members, home care of the sick and injured, family planning; prenatal and postnatal care of mother and infant.

3318 **Creativity and the Pre-School Child.** (1-4) Creativity of the pre-school child as developed through music, art, stories, dramatic plays, games, and play.

Prerequisite: Home Economics 1310.

*May be repeated for credit.*
3320 **Family Economics.** (3-0) Factors affecting family expenditures, study of buying habits of families of different socio-economic backgrounds, consumer protection services, and principles of selection and use of consumer goods and services.

3327 **Household Equipment.** (1-4) Principles involved in the selection, construction, operation, and care of household equipment and their relation to the management process.

3328 **Institutional Equipment.** (1-4) Principles involved in the selection, construction, operation and care of commercial equipment and their relation to the management process.

3336 **Experimental Cookery.** (1-4) Investigation of chemical, physical, and nutritional properties of foods; effects of proportion; food preparation techniques, and additives as related to food quality.
Prerequisite: Home Economics 1330.

3337 **Food and Civilization.** (3-0) Nutrition as a dynamic component of contemporary life with emphasis on relationships between life and food.

3338 **Quantity Food Production Management.** (1-4) The application of scientific food preparation principles to quantity production and determination of food costs for various types of institutions.
Prerequisite: Home Economics 1330.

3339 **Nutrition and Health.** (3-0) Essentials of an adequate diet throughout the life cycle; functions of diet in relationship to physical, mental, and emotional health of normal individuals and families; information on marketing, meal planning, and food preparation as aids in meeting nutritive needs at low cost.

3340 **Design and Selection in Clothing and Textiles.** (3-0) Survey of historical costume design and illustration selection and purchasing patterns of clothing apparel, and a study of household textiles.
Prerequisite: Home Economics 1350, 2340, or consent of the instructor.

3343 **Pattern Study and Tailoring.** (1-4) Study of commercial patterns; construction of basic patterns; flat pattern design; tailoring.
Prerequisite: Home Economics 2340.

3347 **Advanced Clothing.** (1-4) Application of design principles to costume planning and selection. Pattern drafting, alterations, and advanced construction techniques.
Prerequisite: Home Economics 2340.

3352 **The Art of Gourmet.** (1-4) Techniques and procedures used in traditional classic cookery.

3354 **Demonstration Principles.** (1-4) Designed to give experience in planning, presenting, and evaluating demonstrations in all areas of home economics.

3363 **Interior Design Procedures.** (2-2) Application of the basic art principles in planning, decorating and furnishing interiors for contemporary living to reflect function, economy, beauty, and individuality for varying income levels, study of historic and contemporary interiors.

3365 **Commercial Interiors.** (1-4) Analyzing, furnishing, and estimating of moderate to large commercial and industrial spaces.
Prerequisite: Home Economics 2363.

3366 **Residential Interiors.** (1-4) Advanced study in various dimensions, purposes, and characters in relation to the small and large residential shelter.
Prerequisite: Home Economics 2363.

*For non-interior design majors only.
82 / DEPARTMENT OF HOME ECONOMICS

*4150  Special Problems in Home Economics. (1-0) A study of selected areas or aspects of home economics.

4317  Family Living. (3-0) Factors contributing to the creation and maintenance of environments conducive to the best development of family members; reports of research and resource materials relating to child development and family relations; agencies organized to assist families.

4318  Cultural Foundations of Childhood. (3-0) Studies of multi-cultural family-life patterns and customs and their effect on the child.

4326  Home Management of Resources. (2-2) Current problems of individuals and families in the management of available human and non-human resources.

4334  Advanced Nutrition. (3-0) A study of the utilization of nutrients and their interdependence in the maintenance of the human body. Significance of research in the development of concepts in the science of nutrition and the importance of continuing research to the welfare of families.

4335  Community Nutrition. (1-4) Survey of nutrition problems arising from food habits of population groups; methods of making dietary studies and judging apparent nutritional status. Application of principles of learning to nutrition of various groups in the community. Field trips: in conjunction with programs of the Texas State Department of Health and the Texas Department of Mental Health and Mental Retardation.

4338  Diet Therapy. (2-2) Concepts of abnormal nutrition and diseases treated by dietary modification.
Prerequisite: Home Economics 4334.

4340  Fashion Merchandising. (2-2) Fashion merchandising, fashion, design as related to merchandise, production of garments, retailing, the customer and the market, buying for store trade, interdepartmental cooperation, stock promotion, display, consumer satisfaction, alterations and custom orders labor relations, protection.

4348  Trends in Clothing. (3-0) Sociological and psychological aspects related to clothing selection. Survey of cultural influences and contemporary trends.

4350  Practicum in Home Economics. (0-6) Internship program in home economics-related professions, services, business or industry.
Prerequisite: 24 semester hours in Home Economics.

4364  Family Housing. (2-2) Fundamentals of planning a home for the successive stages of the family life cycle. Emphasis on creativity in the organization and use of living space to meet basic human needs and to enrich personal and family living.

4365  Housing in the Community. (3-0) Emphasis on designing living space to promote fullest development of individuals involved; attention to low-income housing and to community, regional, and national organizations that can aid families in meeting housing needs; new developments in materials, building, and services, and recent research and resource materials in family housing.

**4366  Advanced Interiors. (1-4) Advanced interior design study of equipment and materials for interiors; studio procedures, and professional practices of the profession.
Prerequisite: Home Economics 3365, 3366.

* May be repeated for credit.
**May be repeated once with different emphasis for additional credit.
Courses in Home Economics Education

3380 Vocational Homemaking Education: Observation and Methods. (3-2)
Objectives and methods of teaching and evaluating: characteristics and philosophy of useful and gainful programs. Emphasizes the teacher as a person and a professional through identification of needed competencies. Observation in school and community programs.
Prerequisite: Education 3312.

4384 Vocational Homemaking Education: Principles and Process. (3-0)
Prerequisite: Home Economics 3380.

4387 Trends and Issues in Home Economics Education. (3-0) Review of research and literature related to home economics with the view of finding practical applications to secondary education. Emphasis on individual problems.
Prerequisite: Education 4681.

4681 Vocational Homemaking Education: Directed Teaching. Observation and participation in the total vocational homemaking program. Requires a full day in the teaching center for one-half semester and concurrent participation in the problems seminar.
Prerequisite: Home Economics Education 3380, 4384, and completion of all required home economics courses.
Department of Journalism

Roger E. Bennett, Associate Professor and Chairman
Professor: Buckley
Assistant Professors: Glaves, J. W. Henderson, Miloy, Yates
Instructors: Hearn, Tankard
Lecturers: W. E. Anderson, Bohls, Granberry, Nuhn, Reid, Shrader, Trotter

The Professional Journalism Core, composed of 16 semester hours of basic courses, is required of all students desiring to major or minor in journalism. In addition to these courses, the student may choose his area of concentration to give emphasis to either news-editorial, broadcast, magazine, advertising, public relations, teaching or agricultural journalism. The major requirement is 30 semester hours. A minor is required.

Bachelor of Science in Education Degree

<table>
<thead>
<tr>
<th>Liberal Arts and Sciences:</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1310, 1320, and six hours sophomore literature</td>
<td>12</td>
</tr>
<tr>
<td>History 1310, 1320</td>
<td>6</td>
</tr>
<tr>
<td>Political Science 2310, 2320</td>
<td>6</td>
</tr>
<tr>
<td>Art, Theatre Arts, or Music 3213 (or 2300)</td>
<td>2-3</td>
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<tr>
<td>Philosophy 3201 (or 1305)</td>
<td>2-3</td>
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<tr>
<td>Science, Mathematics, or Modern Languages (from two fields)</td>
<td>12</td>
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<tr>
<td>Speech Communication 1310</td>
<td>3</td>
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<tr>
<td>Economics, Sociology or Psychology</td>
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<tr>
<td>Physical Education activities</td>
<td>4</td>
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<tr>
<td>Journalism</td>
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<tr>
<td>Second teaching field</td>
<td>18-24</td>
</tr>
<tr>
<td>Education 3312, 3330, 4331, 4332 and 4681</td>
<td>18</td>
</tr>
<tr>
<td>Electives</td>
<td>5-12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>128</strong></td>
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</tbody>
</table>

Bachelor of Arts

<table>
<thead>
<tr>
<th>Liberal Arts and Sciences:</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1310, 1320, and six hours sophomore literature</td>
<td>12</td>
</tr>
<tr>
<td>History 1310, 1320</td>
<td>6</td>
</tr>
<tr>
<td>Political Science 2310, 2320</td>
<td>6</td>
</tr>
<tr>
<td>Art, Theatre Arts, or Music 3213 (or 2300)</td>
<td>2-3</td>
</tr>
<tr>
<td>Philosophy 3201 (or 1305)</td>
<td>2-3</td>
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<tr>
<td>Science, Mathematics, or Philosophy 2330 (must include work in two departments, and two semesters in one laboratory science)</td>
<td>12-16</td>
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<tr>
<td>Modern Language (or meet proficiency requirement)</td>
<td>14</td>
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<td>Speech Communication 1310</td>
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<tr>
<td>Physical Education activities</td>
<td>4</td>
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<tr>
<td>Journalism</td>
<td>30</td>
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<tr>
<td>Minor</td>
<td>18-24</td>
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<tr>
<td>Electives</td>
<td>8-19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>128</strong></td>
</tr>
</tbody>
</table>
Additional requirements for degree with major in journalism:

**Professional Journalism Core:**
- Journalism 1313—Reporting I. 3
- Journalism 1374—Reporting II. 3
- Journalism 1450—Photography. 4
- Journalism 3383—Editing I. 3
- Journalism 4301—Law of the Press. 3

**Areas of Concentration**

**News-Editorial:** Courses required for news-editorial concentration are Journalism 3203, 3323, 3385, 3390, 4310. A student could take an additional six semester hours of journalism electives.

**Advertising:** Courses required for advertising concentration are Journalism 3367, 3368, 4307, plus five semester hours of journalism courses. A student could take an additional six semester hours of journalism electives.

**Public Relations:** Courses required for public relations concentration are Journalism 3343, 4315, 4320, plus five semester hours of journalism courses. A student could take an additional six semester hours of journalism electives.

**Magazine:** Courses required for magazine concentration are Journalism 3203, 3323, 3324, 3333, 3390. A student could take an additional six semester hours of journalism electives.

**Broadcasting:** Courses required for broadcasting concentration are 3310, 3312, 3314, 4310, plus two semester hours of journalism courses. Speech Communication 1340 is also required. A student could take an additional six semester hours of journalism electives.

**Teaching:** Courses required for concentration in teaching are Journalism 3323, 3327, 3390, 4310, plus two semester hours of journalism courses. A student could take an additional six semester hours of journalism electives.

**Agriculture-Journalism:** Courses required for agriculture-journalism concentration are Journalism 3308, 3323, 3343, 3367, 3368; Agriculture 2313 (or 2379), 3321, 3325 (or 4325), 3329, 4383. A student could take an additional five semester hours of journalism electives.

**Note:** All students planning to receive a teaching certificate in journalism, must successfully complete Journalism 3327 and 3390 in addition to whichever concentration they choose.

**Requirements for a Minor in Journalism**

The professional journalism core plus 8 semester hours of advanced journalism constitutes a minor.

**Teacher Certification:**
- Education 3312, 3330, 4331, 4332, 4681. 18

**Courses in Journalism**

**1301 Introduction to Mass Communication.** (3-0) A survey of the mass media and other areas of mass communications designed to acquaint the student with the field of communications and what it offers. The course also considers historical perspectives of mass communications.

**1313 Reporting I.** (2-2) A course in fundamentals to acquaint the student with newspaper traditions, practices, and objectives as well as techniques of news gathering, interviewing, and writing the various types of news stories. Prerequisite: Working knowledge of typing.
1374 Reporting II. (1-4) Complex and difficult types of news stories, including sports, reviews, criticisms, feature interviews, and editorials; primarily a laboratory course to perfect the student's newswriting skills and techniques; the ethics of reporting and the obligations of the competent journalist. Each student is required to report for The University Star.
Prerequisite: Journalism 1313.

1450 Photography. (3-3) An introductory course in black and white photography stressing the basic fundamentals of the photographic process; use of modern cameras and accessories; procedures in making pictures, from exposed sensitive materials to completed prints; competencies in darkroom procedures.

2150 Publications Production Laboratory. (0-3) This course, which may be taken four times for credit, is open to journalism majors and minors, and to non-majors who wish to gain practical experience working on either The University Star or Genesis.

3203 Editorials, Columns, and Reviews. (2-0) The study and writing of newspaper editorials and columns, as well as various types of reviews from book to music and film. Sports, political, and other types of columns will be undertaken.
Prerequisite: Journalism 1374 and 3383.

3308 Introduction to Broadcast Journalism. (3-0) Survey of the electronic media, designed to acquaint students with the different roles of radio and television, specifically in newswriting and advertising.
Prerequisite: Journalism 1374.

3310 Radio Broadcasting and Newswriting. (3-0) The study and practice of the specialized types of radio broadcasting. Emphasis is placed upon learning the differences between print and electronic journalism newswriting. On the air performance is stressed in different music/news formats.
Prerequisite: Journalism 1374.

3312 Television Broadcast and Newswriting. (3-0) Performance, direction, camera work, scripting for television, and organizational skills are stressed to develop and enhance the journalist's appreciation of the television medium. Twenty-five hours per semester of on the job training are arranged with students taking this course outside of regular class meetings.
Prerequisite: Journalism 3310.

3314 Radio and Television Commercial Writing. (3-0) The study of key aspects of advertising in the electronic media; management, socio-economic considerations; theory; and creative-counseling perspectives. Motion picture commercials for television will be produced.

3319 Picture Editing. (2-4) News communicated by an integration of words and pictures; the history and development of photojournalism, outstanding photo-journalists and their work, graphic techniques and printing processes, pictorial layout in magazines and newspapers, the practical use of photographs and new ideas in the future of photo-journalism.

3323 Feature and Magazine Article Writing. (3-0) Techniques of writing and marketing special features and articles.
Prerequisite: Journalism 1374 and 3383.

3324 Magazine Editing and Production. (3-0) A study of the American magazine, with emphasis on editing and production methods. Students in the class will help write, edit, and produce a magazine.
Prerequisite: Journalism 1374 and 3383.

3327 Methods of Teaching High School Journalism. (3-0) Designed for students entering the teaching profession; this course must be taken before the student teaching experience. Lesson planning, budgeting, adviser-administration
relations, staffing and planning the school newspaper, annual, literary magazine, and instruction in the basics of journalism.

Prerequisite: Journalism 1374, 1450, 3383, and student must have a 3.0 grade-point average in Journalism and a 2.5 over-all grade-point average.

3329 Sports as News. (2-2) Problems in print and radio-television media coverage of athletic events.

3333 The Press and Contemporary Affairs. (3-0) Explanation and interpretation of current events as a function of the press; a critical study of contemporary local, state, national, and international problems and how they are treated by newspapers and news magazines. (May be counted toward Academic Foundations.)

3343 Introduction to Public Relations. (3-0) Principles, history, and practice of public relations in business, educational institutions, social welfare organizations, government and the military. Emphasis on public relations responsibilities, ethics, and career opportunities.

3350 Advanced Photography. (2-3) Practical photography with emphasis on craftsmanship, theory and visual communication, including experience in a variety of professional and technical areas.

Prerequisite: Journalism 1450.

3367 Advertising. (3-0) The fundamentals of advertising; special attention to advertising techniques for the mass media; copy preparation, headlines, use of art work and layout theories for newspaper and magazine advertising; direct mail, radio, outdoor, and other types of advertising.

3368 Advertising Copy and Layout. (3-0) Intensive study of writing advertising copy and making layouts for all media. Research methods, copytesting, and complete campaigns.

Prerequisite: Journalism 3367 or consent of the instructor.

3383 Editing I. (2-2) Instruction in copy reading, proof reading, headline writing, typography and newspaper makeup.

Prerequisite: Journalism 1313.

3385 Editing II. (2-4) Emphasis on make-up and typography of daily and weekly newspaper. Includes laboratory work on the copy desk of the student newspaper.

Prerequisite: Journalism 3383.

3390 Publications Production. (2-4) Intense study of mechanical and production problems in publishing newspapers, yearbooks, magazines, and brochures. The student would learn layout and design through practical experience in the laboratory situation and how to solve the mechanical problems that might arise.

4301 Law of the Press. (3-0) A study of the precedents and present law governing news, advertising, and photography of the printed and broadcast media. Libel, privilege, right of privacy, fair comment, and constitutional guarantees get attention.

4302 History of Journalism. (3-0) Development of the newspaper in the United States from 1690 to the present. The relationship of social, political, and economic factors to the evolution of the American press.

4305 Theories of Mass Communication. (3-0) Comparative study of views and theories of communication through the news media; theories of perception and communication, information and recall involving newspapers, magazines, and electronic media.

4307 Advertising Campaigns and Production. (2-4) Development and coordination of the total concept of advertising. Use of the various media, practice in
the development and production of programs with appropriate consideration
given to costs, techniques and effectiveness as they relate to particular objec-
tives.
Prerequisite: Journalism 1374, 3367, 3368.

4310 Public Affairs Reporting. (3-0) An advanced course in reporting, deal-
ing with the coverage of the legislative, executive, and judicial branches of gov-
ernment as well as the economic and political implications resulting from gov-
ernmental and business relationships.
Prerequisite: Journalism 1374 and 3383.

4315 Public Relations Case Studies. (3-0) Case studies and typical public rela-
tions problems in industry, labor, education, government, social welfare and
trade associations, including analysis of the planning and implementation of
communications programs.
Prerequisite: Journalism 3343.

4318 Publicity Methods. (3-0) This course is designed for non-journalism
majors. A study of contemporary public relations principles, including the plan-
ning, preparation, and dissemination of publicity. Use of the media is explored in
achieving publicity for companies, corporations, recreational and tourist facili-
ties, social welfare organizations, labor societies and schools.

4320 Public Relations Campaigns. (3-0) A definitive study of the planning,
development, preparation, and implementation of comprehensive public rela-
tions campaigns, including analysis of specialized communication techniques
and adoption of communication materials related to specific objectives.
Prerequisite: Journalism 1313, 1374, 3343.

4322 Public Relations Practicum. (1-5) Actual work experience as a public rela-
tions intern with a public relations department or organization, or on a team
project assigned by the instructor.
Prerequisite: Journalism 1313, 1374, 3343, 4315, 4320, or consent of the in-
structor.

4330 Practicum I. (0-6) Actual job experience as a beginning journalism
intern.
Prerequisite: Consent of the Chairman of the Department.

4335 Practicum II. (0-6) Actual job experience as an advanced journalism
intern.
Prerequisite: Consent of the Chairman of the Department.
School of Business

Ed D. Roach, Ph.D., Dean

Department of Accounting and Computer Information Systems ... Bill J. Bishop, Ph.D., Chairman
Department of Finance and Economics ... Paul R. Gowens, Ph.D., Chairman
Department of General Business ... Milton R. Bryant, Ph.D., Acting Chairman
Department of Management and Marketing Robert E. Holmes, Ph.D., Chairman
School of Business

The mission of the School of Business is to provide all business students with the opportunity to develop their maximum potential academically, professionally, and personally so as to enable them to become competent, accountable individuals prepared to assume successful and productive lives.

Bachelor of Business Administration
(128 semester hours)

The Bachelor of Business Administration (BBA) curriculum is based upon a broad foundation of general education requirements to include work in mathematics, social science, humanities, and the natural sciences. Except for the Bachelor of Business Administration Degree in Computer Information Systems, the BBA curriculum comprises a common core of required courses in business administration, plus an additional 9 to 24 semester hours in a selected concentration. A student may concentrate in accounting, computer information systems, economics, finance, management, marketing, office administration, or small business management. Electives can be selected in such a manner so as to broaden the student’s knowledge in a subject area; however, the total number of semester hours in business administration cannot exceed 60 percent (76) of the total number of hours required for the degree.

Upon completion of 60 semester hours, a student should apply for a degree outline in the department chairman’s office.

Core Curriculum
Accounting 2361, Elementary Accounting I.
Accounting 2362, Elementary Accounting II.
Business Administration 1321, Introduction to Business.
Business Administration 3333, Business Statistics.
Business Administration 3353, Business Communications.
Business Administration 3361, Business Law I.
Economics 2310, Principles of Economics.
Economics 2320, Principles of Economics.
Economics 3311, Money and Banking.
Finance 3312, Corporation Finance.
Management 3303, Principles of Management.
Marketing 3343, Marketing.
### Freshman Year

<table>
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<td>English 1320</td>
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### Sophomore Year

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<thead>
<tr>
<th>First Semester</th>
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</table>

*A concentration in Office Administration requires six semester hours of shorthand (Business Administration 1331 and 1332), and three hours of typewriting (Business Administration 1325 or equivalent).

**Chemistry, physics, or biology.
Department of Accounting and Computer Information Systems

Bill J. Bishop, Professor and Chairman
Professor: Johnston
Associate Professors: Cook, Humphrey, O.S. Lee, Payne, Reese, Yeary
Assistant Professor: Stott
Instructors: Chapman, Ethridge, Gindler, Godwin, Hickman, Langabeer, Meixner, C.C. Ross, Trip, Vernon

The accounting program is designed to prepare the student for extensive career opportunities in public, industrial, and governmental accounting as well as other accounting-related fields.

The mission of the Computer Information Systems Program is to produce graduates that are not only technically competent in the theoretical concepts of computers, but can also apply these concepts to structured and nonstructured organizational problems in business, industry and government. Computer Information Systems is one of the most dynamic of all career fields at the present time. Graduates have the background required for positions as programmers, programmer/analysts, systems analysts, and computer managerial positions.

Concentration in Accounting

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<tr>
<th>Junior Year</th>
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<td>Management 3303</td>
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<td>15</td>
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*Computer Information Systems 2320, 2321, and 3321 recommended.
### Concentration in Computer Information Systems

#### Junior Year

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<tr>
<th>First Semester</th>
<th>Hours</th>
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<th>Hours</th>
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<td>Advanced elective in Business</td>
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<td>Business Administration 3333</td>
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<tr>
<td>Computer Information Systems 2320</td>
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<td>Computer Information Systems</td>
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<td>Economics 3311</td>
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<td>2-3</td>
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<td>Management 3303</td>
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**Total Hours:** 17

#### Senior Year

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<td>Computer Information Systems 3371, 4322</td>
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**Total Hours:** 15

### *Bachelor of Business Administration Degree with a Major in Computer Information Systems*

#### Freshman Year

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<tr>
<td>Mathematics 1319</td>
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<td>Mathematics 1329</td>
<td>3</td>
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<td>Science (Chemistry, Physics, Biology)</td>
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<td>Science (Chemistry, Physics, Biology)</td>
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**Total Hours:** 16-17

#### Sophomore Year

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<th>First Semester</th>
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<th>Second Semester</th>
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<tr>
<td>Accounting 2361</td>
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<td>Speech Communication 2320</td>
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<td>Political Science 2320</td>
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<tr>
<td>Physical Education activity</td>
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<td>Psychology 2310</td>
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</table>

**Total Hours:** 16

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*The core course, Business Administration 1321, is not required for the Bachelor of Business Administration Degree with a Major in Computer Information Systems.*
Courses in Accounting

2361 Elementary Accounting I. (3-0) An introduction to accounting including the accounting cycle, financial statements, accounting concepts, and other topics such as data processing and accounting systems.

2362 Elementary Accounting II. (3-0) Continuation of introductory accounting with emphasis on partnerships, corporations, cost systems, budgeting, taxes, accounting reports for management, funds statement, consolidated statements, and financial statement analysis.

Prerequisite: Accounting 2361.

3302 Management Accounting. (3-0) Financial and administrative accounting; analysis and interpretation of financial data; accounting in planning and budgeting, in managerial control, and in administrative decision-making.

Prerequisite: Accounting 2362. Not open to Accounting majors.

3313 Intermediate Accounting I. (3-0) In-depth study of principles and procedures introduced in elementary accounting. Analysis of accounting concepts with emphasis on current theory and practices relating to corporate financial statements particularly stressing corporate assets.

Prerequisite: Accounting 2362.

3314 Intermediate Accounting II. (3-0) Continued analysis of current accounting concepts relating to corporate financial statements emphasizing liabilities and stockholders' equity; comparative statements and analytical procedures; special problems concerning financial statements including correction of errors; incomplete records, and price level changes.

Prerequisite: Accounting 3313.

4313 Auditing. (3-0) Auditing principles and procedures; auditing standards and ethics; working papers and reports.

Prerequisite: Accounting 3314.

*Nine semester hours of electives to be chosen from: Computer Information Systems 3372, 3373, 4322, 4343, 4344, and 4345.
4316 Advanced Accounting. (3-0) Partnerships, installment sales and consignments; branch and agency accounts; consolidated statements; receivership accounting; statements of affairs; estates and trusts.
Prerequisite: Accounting 3314.

4327 Income Tax Accounting. (3-0) Principles and problems in accounting for income taxes and reporting; procedures in economic determination; problems in tax finding; taxes in relations to managerial accounting.
Prerequisite: Accounting 2362.

4363 Governmental Accounting. (3-0) Accounting for municipalities and other governmental organizations, including procedures in funds accounting, budgetary control, and financial reporting.
Prerequisite: Accounting 2362.

4365 Cost Accounting. (3-0) Accounting for materials, labor, and burden; job cost accounting; process cost accounting; distribution costs; budgetary procedures; standard costs.
Prerequisite: Accounting 2362.

4385 Accounting Systems. (3-0) Elements of accounting systems; manual and machine methods; systems design and installation.
Prerequisite: Accounting 3313.

Courses in Computer Information Systems

2320 Introduction to Data Processing. (3-0) Introduction to the electronic computer as a business tool; fundamentals of data processing; introduction to a problem-oriented programming language with applications in business and economics.

2321 FORTRAN Language Programming. (3-0) The study of the FORTRAN programming language to include stored program concepts, business and economic modeling, subscripting, file handling, and subroutines as applied to business and economic problems.
Prerequisite: Computer Information Systems 2320.

2322 Programming Techniques and Machine Organization. (3-0) Concepts of problem analysis and solution using lower-level symbolic languages as a man-machine language interface. Emphasis is on program debugging techniques, program optimization, and data representation and translation.
Prerequisite: Computer Information Systems 2321.

3321 COBOL Programming. (3-0) Introduction to programming using the COBOL language as applied to commercial applications. Included are basics of the COBOL language, subscripting, indexing, and the generation of reports for commercial applications.
Prerequisite: Computer Information Systems 2321.

3323 Introduction to Mini-Computers. (3-0) A study of the use of minicomputers in business. Designed to improve the student's problem-solving skills and techniques, to demonstrate how the mini-computer can be an important tool in assisting larger computers, and to broaden the student's knowledge of data processing.
Prerequisite: Computer Information Systems 2321, or consent of instructor.

3370 Management Information Systems. (3-0) Principles of systems analysis and design of management information systems. Characteristics of data systems and of management information systems. Study of the steps employed in systems analysis and design. Included is an introduction to PERT/CPM, file structures and data management, and sorting techniques.
Prerequisite: Computer Information Systems 2321 or 3321.

3371 Advanced COBOL. (3-0) Intermediate and advanced features of the COBOL programming language. Programming in COBOL of a structured set of problems. Included are index sequential and direct access file processing, report-writer feature, sort feature, and subprogramming.
Prerequisite: Computer Information Systems 3321.

3372 Data Base Management and Retrieval. (3-0) Concepts and methods in design, establishment, and maintenance of the data base for a management information system. Included are one-way lists, two-way lists, circular lists, trees, queues, tables, stacks and directories. Emphasis is on construction of file organizations and retrieval methods for accessing the data base.
Prerequisite: Computer Information Systems 3370, or consent of instructor.

3373 Introduction to Management Science. (3-0) The use of quantitative tools of analysis applied to business problems in order to aid management decision-making. Included are probability theory, PERT, optimization, linear programming, inventory control, and simulation.
Prerequisite: Consent of instructor.

4322 Computer System Development and Design. (3-0) Concepts and methods of systems analysis and design for information processing in business with an introduction to general systems theory. Designed to allow the student to extend his knowledge in programming techniques and his major area by allowing him to undertake a computer case study.
Prerequisite: Computer Information Systems 3371.

4343 Control of Management Information Systems. (3-0) Theory and practice of planning, control, and administration as applied to management information systems. Emphasis is on the control elements in systems design and on the maintaining and management of an information system.
Prerequisite: Computer Information Systems 3370 or consent of instructor.

4344 Computer Center Management. (3-0) A study of the organization and operation of a data processing center. Emphasis will be placed on all aspects of systems and program documentation and on the managerial aspects of operating a data processing installation.
Prerequisite: Consent of instructor.

4345 Applied Problems in Management Information Systems. (3-0) A one semester course of independent reading, tutorial sessions, and individual research projects, including investigation and application of special topics in terms of software development as applied to problems in business.
Open to students of senior rank with consent of the Chairman of the Department of Accounting and Computer Information Systems.
## Department of Finance and Economics

**Paul R. Gowens**, Professor and Chairman  
Professor: **Stevenson, Morgan**  
Associate Professors: **Carman, Savage**  
Assistant Professors: **English, Yeargan**  
Instructors: **Chesney, Fabritius, Kruger, Mason**

The program in finance prepares students for careers in banking, insurance, finance companies, brokerage firms, and private industries. Finance is the study of money management in the free enterprise system.

The program in economics is designed to prepare the student for various career opportunities including applications of economics in the research and administration of business firms, banks, educational institutions, and governmental agencies.

### Concentration in Finance

**Junior Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced elective in Business</td>
<td>3</td>
<td>Advanced elective in Business</td>
<td>3</td>
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<tr>
<td>Business Administration 3333</td>
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<td>Business Administration 3353</td>
<td>3</td>
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<tr>
<td>Economics 3311</td>
<td>3</td>
<td>Finance 3318, 3330</td>
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<tr>
<td>Finance 3312</td>
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<td>Humanities or Behavioral</td>
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<tr>
<td>Free elective</td>
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<td>Science</td>
<td>2-3</td>
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<tr>
<td>Management 3303</td>
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<td>Marketing 3343</td>
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**Senior Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
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<td>Finance 4319</td>
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### Concentration in Economics

**Junior Year**

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**Senior Year**

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<th>Hours</th>
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Senior Year

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<th>Second Semester</th>
<th>Hours</th>
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Bachelor of Arts Degree (Economics)
(128 semester hours)

Notes:

1. A major in economics requires 24 semester hours, including Economics 2310, 2320, 3314, and 3315.
2. Six additional hours of economics (electives) may be applied above those required for the major.
3. Majors are encouraged to take a minimum of 12 semester hours of mathematics including Economics 4315.
4. A teaching certificate is available with this degree plan which requires 27 semester hours in economics, including Economics 2310, 2320, 3314, and 3315 as a first teaching field and a second teaching field of 24 semester hours. Eighteen semester hours of advanced education courses are required.
5. See section of catalog requirements for a Bachelor of Arts degree.

Suggested Degree Plan

Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tr>
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<tr>
<td>History 1310, 1320</td>
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<tr>
<td>Laboratory Science</td>
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<tr>
<td>Mathematics 1319, 1329</td>
<td>6</td>
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<tr>
<td>Other courses (minor, Modern Language)</td>
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Sophomore Year

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Junior Year

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<td>Art, Theatre Arts, or Music 3213 (or 2300)</td>
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<tr>
<td>Economics 3314, 3315</td>
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<tr>
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<td>Electives</td>
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<tr>
<td>Minor</td>
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<tr>
<td>Philosophy 3201 (or 1305)</td>
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<tr>
<td>Political Science 2310, 2320</td>
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Senior Year

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<tr>
<td>Minor</td>
<td>9</td>
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<td></td>
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Undergraduate Total: 128 semester hours
Notes:
1. Twenty-seven semester hours in economics are required, including Economics 2310, 2320, 3314, and 3315.
2. A second teaching field (minor) must be selected.
3. Twelve to 14 semester hours total are required with two of the following fields to be represented: science, mathematics, or modern language.

Suggested Degree Plan

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<thead>
<tr>
<th></th>
<th>Freshman Year</th>
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<tr>
<td></td>
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<td>Political Science 2310, 2320</td>
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<td>Science, Mathematics, or Modern Language</td>
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<tr>
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<table>
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<tbody>
<tr>
<td></td>
<td>Hours</td>
<td>Hours</td>
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<tr>
<td>Art, Music, or Theatre Arts 3213 (or 2300)</td>
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<td>Economics 4331, 4332, 4681</td>
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<tr>
<td>Economics 3314, 3315</td>
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<td>Electives</td>
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<td>Philosophy 3201 (or 1305)</td>
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<td>30-33</td>
<td>33</td>
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</table>

Courses in Finance

3301 Real Estate. (3-0) Fundamental principles of real estate; legal processes and instruments; valuations; planning; development, and sales; property management; real estate financing; private and public interests; other basic factors in real estate practice.
Prerequisite: Accounting 2362.

3312 Corporation Finance. (3-0) The financial instruments and institutions through which the modern corporation provides for its long and short term capital requirements.
Prerequisite: Accounting 2362.

3318 Investment Analysis. (3-0) A study of the principles governing the proper investment of personal and institutional funds, information sources, exchanges, and regulation.
Prerequisite: Accounting 2362.
3324 Real Estate Appraisal. (3-0) Appraisal principles and procedures; valuation factors; capitalizing income into value; appraisals in relation to purposes of valuation; other practical factors in valuation.

3330 General Insurance Principles. (3-0) Risk and insurance, fire, marine, casualty, property, life, and health contracts. This course will be taught from a consumer’s standpoint.

4310 Life Insurance. (3-0) Risk and insurance; policy provisions; types of policies; annuities; premiums; reserves; investments; special forms of life insurance; other basic factors in life insurance.

4311 Stock Market Analysis. (3-0) An analysis of stock trends from the standpoint of the technical approach; an analysis of the Dow Theory with attention given to reversal patterns, consolidations, formations, support and resistance concepts and trend lines; a study of the technical problems involved in charting and selecting securities.

Prerequisite: Accounting 2362.

4317 Case Problems in Finance. (3-0) A study of cases which are essentially descriptions of actual business financial situations. Cases are analyzed and “issues” and “alternatives” are identified and evaluated.

Prerequisite: Accounting 2362, Business Administration 3333, Finance 3312.

4319 Financial Institutions. (3-0) The monetary, credit, and fiscal policies and the instruments and institutions through which they operate to provide corporate funds for development, growth, and operations.

Prerequisite: Accounting 2362, Finance 3312, Economics 3311.

4329 Real Estate Management. (3-0) Study of real estate management, including the real estate market, merchandising, tenant selection, and urban renewal. Other topics are management of commercial buildings, retail stores, apartments, and single family residences, maintenance, records, insurance, and public relations.

4339 Real Estate Law. (3-0) A study of landlord-tenant relationships: Implied warranties; builder-seller liability; publicity of land developers; restrictions on land developments; federal regulations; residential mortgages; purchaser protection; zoning laws; sell-and-build contracts; condominium law; and land transactions.

Prerequisite: Business Administration 3361.

Courses in Economics

Economics 2310, 2320 are prerequisite to all advanced courses except 3313, 3316, and 3344.

2301 Economics of Contemporary Issues. (3-0) A non-technical examination of economic philosophies, problems, and policies. The primary objective of this course is to develop an interest in and an appreciation for the relevance of economic analysis to problems students understand. This course is not for economics or business administration majors and cannot be used as a prerequisite for any other economics course.

2310 Principles of Economics. (3-0) An introduction to the macro-economics of a modern industrial society. Emphasis on the analysis of national income; economic stability; fiscal policy; money and banking; economic growth; and international trade.

2320 Principles of Economics. (3-0) An introduction to the micro-economics of a modern industrial society. Emphasis on analysis of the composition and pricing of the national output; supply and demand; cost and price concepts; market structures; income distribution; and selected economic problems.
3311 Money and Banking. (3-0) Money and credit in the modern economy; development of modern systems of money and banking; the structure of the Federal Reserve System; survey of monetary theory.

3313 Labor Economics. (3-0) Development and structure of American unions; theories of union growth; economics of collective bargaining and wage determination; survey of labor legislation. (F)

3314 Intermediate Price Theory. (3-0) An intensive examination of supply, demand, and the theory of price determination under conditions of perfect and imperfect competition; the competitive pricing system as a whole. (F)

3315 National Income, Employment, and the Price Level. (3-0) An examination of the determinants of national income, employment, and the price level; the role of investment, money supply, and governmental expenditures with the Keynesian and Neo-classical theories of income determination. (S)

3316 Economics of Health and Welfare. (3-0) An economic analysis of the relationships between health and the general welfare. Factors that determine health levels in the United States are identified, and the relationship between health and changes in the general welfare are explored.

3317 International Economics. (3-0) An examination of the basis for trade between nations and the means by which trade is financed; custom unions, balance-of-payments problems, and other current international economic issues. (Alt. Yrs.)

3322 Economic Growth and Development. (3-0) An introduction to the theory and history of economic growth with special reference to the problem areas which are presently underdeveloped. (Alt. Yrs.)

3327 Public Finance. (3-0) The growth of public expenditures, revenues, and debts of the United States; theories of taxation and tax incidence, the effects of public expenditures and taxes on economic growth.

3334 Business Enterprise and Public Policy. (3-0) A survey of the development and structure of contemporary American industry and of government regulation of business.

3335 Managerial Economics. (3-0) The application of economic analysis to the formulation of business policies, including demand analysis, and pricing policies. (F)

3344 Economic History of the United States. (3-0) Economic history of the United States from colonial times to the present. See History 3344.

3353 Comparative Economic Systems. (3-0) Theory and practice of capitalism, socialism, and communism. (Alt. Yrs.)

Prerequisite: Twelve hours of economics or six hours of economics and 12 hours of other social sciences.

4315 Mathematical Economics. (3-0) The presentation and interpretation of mathematical models explaining the equilibrium level of income and employment, economic growth, cycles, and the determination of prices of products and of productive resources.

4320 Studies in Economic Theory and Problems. (3-0) A one semester course of independent reading, tutorial sessions, and individual research projects. This is open to students of senior rank with consent of the chairman of the Department of Finance and Economics.

4330 History of Economic Thought. (3-0) A survey of the development of economic ideas in the Western world from earliest times through the 19th Century. (Alt. Yrs.)

4333 Economics for Secondary Education. (3-0) Designed to develop basic economic concepts and analytical skills for use in secondary programs.
4340  **Regional Economics.** (3-0) An analysis of factors influencing the economic growth of a region, with emphasis on studies of shifts in population and in patterns of economic activities, industrial location analysis, input-output techniques, methods of estimating local income, multiplier and cycles, and role of government in regional growth. (Alt. Yrs.)

4360  **Economics of Public Utilities.** (3-0) The economics of public utility enterprises with emphasis on regulation, valuation, rate-making, and relation of public utilities to local governmental administration and regional planning. Special studies of current problems in electrical power, natural gas, and local transit systems.
Department of General Business

Milton R. Bryant, Assistant Professor and Acting Chairman
Assistant Professors: Chiodo, Finch, Hastedt, Lann, Peach
Instructors: H. M. Augustin, Cate, Fields, Kazmi, Keefe, Sanders, Smithers, Sturdivant, Tomblin

The Department of General Business offers courses leading to the Bachelor of Business Administration (BBA) degree with a concentration in Office Administration and the Bachelor of Science in Education degree with a major in Business Education. The programs are designed to prepare individuals for responsible technical and professional careers in business, government, and educational organizations. The courses provide the professional preparation and development as well as technical training of the individual in such areas as business law, business communications, statistics, shorthand, and typing.

Note: Students majoring in business administration who present one or more credits in typewriting as partial fulfillment of admission requirements may not enroll in Business Administration 1323 for credit.

Concentration in Office Administration

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>First Semester</th>
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<th>Second Semester</th>
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<td>Systems 2320</td>
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Bachelor of Science in Education Degree
(Business Education)
(128 semester hours: includes certificate)

Option A

Notes:
1. Thirty semester hours are required for the major (first teaching field), of which a minimum of 12 semester hours must be advanced.
2. A second teaching field (minor) must be selected.
3. Twelve to 14 semester hours total are required with two of the following fields to be represented: Science, mathematics, or modern language.

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<th>Sophomore Year</th>
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<td>Philosophy 3201 (or 1305)</td>
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<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
<tr>
<td>Art, Theatre Arts, or Music 3213 (or 2300)</td>
<td>2-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free electives</td>
<td>2-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30-35</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Bachelor of Science in Education Degree
(Business Education)
(128 semester hours: includes certificate)

Option B

Notes:
1. Thirty-three semester hours are required for the major (first teaching field), of which a minimum of 12 semester hours must be advanced.
2. A second field (minor) must be completed.
3. Twelve to 14 semester hours are required with two of the following fields to be represented: Science, mathematics, or modern language.

*Mathematics 1315, 1319.*
<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration</td>
<td>6</td>
<td>Accounting 2361, 2362</td>
<td>6</td>
</tr>
<tr>
<td>1331 and 1332</td>
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<td>Business Administration 1325</td>
<td>3</td>
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<tr>
<td>English 1310, 1320</td>
<td>6</td>
<td>English (literature)</td>
<td>6</td>
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<tr>
<td>History 1310, 1320</td>
<td>6</td>
<td>*Science, Mathematics, or</td>
<td></td>
</tr>
<tr>
<td>Modern Language</td>
<td>6-8</td>
<td>Modern Language</td>
<td>6-8</td>
</tr>
<tr>
<td>Second teaching field</td>
<td>6</td>
<td>Speech Communication 2320</td>
<td>3</td>
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<tr>
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<td></td>
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<td>32-34</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>32-34</td>
</tr>
<tr>
<td>Junior Year</td>
<td>Hours</td>
<td>Senior Year</td>
<td>Hours</td>
</tr>
<tr>
<td>Art, Music, or Theatre Arts</td>
<td>2-3</td>
<td>Business Administration 3315,</td>
<td>9</td>
</tr>
<tr>
<td>3213 (or 2300)</td>
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<td>3333, 3366</td>
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<tr>
<td>Business Administration 3361</td>
<td>3</td>
<td>Education 4331, 4332, 4681</td>
<td>12</td>
</tr>
<tr>
<td>Education 3312, 3330</td>
<td>6</td>
<td>Marketing 3343</td>
<td>3</td>
</tr>
<tr>
<td>Free electives</td>
<td>2-5</td>
<td>Second teaching field</td>
<td>6</td>
</tr>
<tr>
<td>Management 3303</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philosophy 3201 (or 1305)</td>
<td>2-3</td>
<td></td>
<td>30</td>
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<tr>
<td>Political Science 2310, 2320</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second teaching field</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30-35</td>
</tr>
</tbody>
</table>

**Courses in Business Administration**

1321 **Introduction to Business.** (3-0) A basic course in the fundamentals of business. An overview to develop an intelligent understanding of the realistic problems and practices of business. Study of business organization and operation, business functions and various areas of business.

1323 **Beginning Typewriting.** (3-1) An intensive course aimed at mastery of the techniques of touch typewriting. Students majoring in business who present a unit of typewriting in partial fulfillment of entrance requirements may not enroll for credit. **Not offered during summer terms.**

1325 **Advanced Typewriting.** (3-1) Applied office typewriting with emphasis on problem typing, typing of various business forms and reports; stencil preparation; manuscript typing; typing of legal documents; concomitant instruction in office skills, in Business English, and the meaning and use of various business and legal forms and documents. **Not offered during summer terms.**

1331 **Beginning Shorthand.** (3-2) First course in Gregg Shorthand. Special emphasis on theory, vocabulary development and skill building through reading and writing. Material is dictated at varying speeds for three minute periods during the latter half of the semester. Class meets five hours per week. **Not offered during summer terms.**

1332 **Intermediate Shorthand.** (3-2) Second course in Gregg Shorthand. Review of shorthand theory. Special emphasis on skill building and transcription of shorthand notes. New material is dictated at varying speeds for five minute periods. Class meets five hours per week. **Not offered during summer terms.**

*Prerequisite: Business Administration 1331 or one year of high school shorthand and typewriting speed of 30 words per minute. **Not offered during summer terms.**

*Mathematics 1315, 1319.*
1343  **Advanced Shorthand.** (3-2) Third course in Gregg Shorthand. Review of shorthand theory. Emphasis is on speed dictation, vocabulary building, correct letter form and mailable copies. Class meets five hours per week. Not offered during summer terms.

Prerequisite: Business Administration 1332 or equivalent and typewriting skill of 30 words per minute.

3315  **Methods of Teaching Business Subjects.** (3-0) A study of the methods, materials and facilities for teaching both skilled and non-skilled business subjects. Offered during fall semester only.

Prerequisite: Business Administration 1321 or 1332, 1325, Accounting 2362, and six semester hours advanced business courses. Open to Business Education majors only.

3333  **Business Statistics.** (3-0) A basic introductory course covering descriptive and inferential statistical techniques for business and economic decision making; topics include measures of central tendency and dispersion, sampling, hypothesis testing, simple linear regression and correlation analysis, and time series.

Prerequisite: Mathematics 1319 and 1329.

3353  **Business Communications.** (3-0) The combined study of the business letter, report writing, practical English. Practice in composing all types of business letters including daily transactions, orders, remittances, acknowledgements, inquiries, and applications. Study of the theory of business communication including communication models, general semantics, and the cause of miscommunication.

Prerequisite: Typewriting ability of 30 words a minute and credit for freshman English.

3361  **Business Law I.** (3-0) The fundamentals of business law are introduced in this course. Topics covered are contracts, agency, commercial paper, and sales.

3362  **Business Law II.** (3-0) The C.P.A. requirements in the field of business law are covered in this course. Particular stress is placed on the form of business organization. Topics covered are security devices and insurance partnerships, corporations, personal and real property, estates, and bankruptcy, and government regulation of business and labor.

3365  **Office Management.** (3-0) Office organization and administration; office layout and location; physical factors and environment; office services; procedures, and methods; office forms; office furniture and equipment; office machines and appliances; data processing.

3366  **Secretarial Practice and Office Procedures.** (3-0) The integration of stenographic, typewriting, office-machine, and clerical skills through the use of actual business procedures. Offered during fall semester only.

Prerequisite: Business Administration 1325 or equivalent and six hours of shorthand.
Department of Management and Marketing

Robert E. Holmes, Professor and Chairman
Professors: Abrahamson, Roach, L.H. Smith, W.L. Wilson
Associate Professors: R.N. Carter, Eure, Gallagher, Halatin, Hunnicutt, Ross
Assistant Professors: Bryant, Farley,
Instructors: Forker, Hartley, Hinkson, Mollenkopf, Smithers, Strickland

The Department of Management and Marketing offers courses leading to the Bachelor of Business Administration Degree with concentrations in management, marketing, and small business management. Programs of study are designed to prepare individuals for a variety of challenging professional and managerial careers in a variety of business and government organizations. Management integrates social and technical processes. Organizational goal accomplishment is emphasized as it is affected through study of organizational theory, behavior, interpersonal communications, and effective resource utilization. Marketing concepts, processes, the role of the consumer, the marketing institution, the production of goods and/or services, and the financing of the business enterprise are emphasized.

Concentration in Management

Junior Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced electives in Business</td>
<td>6</td>
<td>Advanced elective in Business</td>
<td>3</td>
</tr>
<tr>
<td>Business Administration 3333</td>
<td>3</td>
<td>Business Administration 3353, 3361</td>
<td>6</td>
</tr>
<tr>
<td>Economics 3311</td>
<td>3</td>
<td>Finance 3312</td>
<td>3</td>
</tr>
<tr>
<td>Free electives</td>
<td>2</td>
<td>Humanities or Behavioral Science</td>
<td>2-3</td>
</tr>
<tr>
<td>Management 3303</td>
<td>3</td>
<td>Marketing 3343</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>Total</strong></td>
<td><strong>17-18</strong></td>
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Senior Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Advanced Management elective</td>
<td>3</td>
<td>Advanced elective in Business</td>
<td>3</td>
</tr>
<tr>
<td>Free electives</td>
<td>6</td>
<td>*Advanced Management elective</td>
<td>3</td>
</tr>
<tr>
<td>Management 4373, 4375</td>
<td>6</td>
<td>Free electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td>Management 4335</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

*Advanced electives in management to be chosen from: 3340, 4330, 4336, 4371.
## Concentration in Marketing

### Junior Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced electives in Business Administration</td>
<td>6</td>
<td>Business Administration 3353, 3361</td>
<td>6</td>
</tr>
<tr>
<td>Business Administration 3333</td>
<td>3</td>
<td>Finance 3312</td>
<td>3</td>
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<tr>
<td>Economics 3311</td>
<td>3</td>
<td>Humanities or Behavioral</td>
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<tr>
<td>Free elective</td>
<td>2</td>
<td>Science</td>
<td>2-3</td>
</tr>
<tr>
<td>Marketing 3343</td>
<td>3</td>
<td>Management 3303</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
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### Senior Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Marketing elective</td>
<td>3</td>
<td>Advanced elective in Business</td>
<td>3</td>
</tr>
<tr>
<td>Free electives</td>
<td>6</td>
<td>Advanced Marketing elective</td>
<td>3</td>
</tr>
<tr>
<td>Management 4335</td>
<td>3</td>
<td>Free electives</td>
<td>3-6</td>
</tr>
<tr>
<td>Marketing 4337</td>
<td>3</td>
<td>Marketing 4320</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
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</table>

## Concentration in Small Business Management

### Junior Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced elective in Business</td>
<td>3</td>
<td>Advanced elective in Business Administration</td>
<td>3</td>
</tr>
<tr>
<td>Business Administration 3333</td>
<td>3</td>
<td>Economics 3311</td>
<td>6</td>
</tr>
<tr>
<td>Free elective</td>
<td>2</td>
<td>Finance 3312</td>
<td>3</td>
</tr>
<tr>
<td>Management 3303</td>
<td>3</td>
<td>Humanities or Behavioral</td>
<td>2-3</td>
</tr>
<tr>
<td>Marketing 3343</td>
<td>3</td>
<td>Management 3340</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
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</table>

### Senior Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 3302</td>
<td>3</td>
<td>Advanced electives in Business</td>
<td>6</td>
</tr>
<tr>
<td><strong>Advanced Small Business Management elective</strong></td>
<td>3</td>
<td>Free elective</td>
<td>3</td>
</tr>
<tr>
<td>Free electives</td>
<td>6-9</td>
<td>Management 4336</td>
<td>3</td>
</tr>
<tr>
<td>Management 4335</td>
<td>3</td>
<td><strong>Total</strong></td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15-18</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Courses in Management

**3303 Principles of Management.** (3-0) A study of the basic managerial functions of planning, organizing, staffing, directing, and controlling resources to reach objectives. The inter-relatedness of the parts of an organization, and the role of the manager in the total organizational system are stressed.

Prerequisite: Accounting 2362, or consent of chairman.

*Advanced electives in Marketing to be chosen from 3355, 3367, 4321.
**Advanced Small Business Management electives to be chosen from Accounting 4327, Management 4373, Marketing 3355, 3367, 4337.
3340 Management of the Small Business Enterprise. (3-0) A survey of the principles and problems of managing the small business enterprise. Topics studied include forms of ownership, sources of funds, accounting, management, marketing, taxation, and legal and environmental considerations. Basic types of enterprises studied are retail firms, service firms, wholesale firms, and manufacturing firms.

Prerequisite: Accounting 2362, Management 3303, Business Administration 3333, Marketing 3343.

4330 Management of Industrial Production. (3-0) Management of production functions of a business (not limited to manufacturing). Plant location, layout of facilities, inventory control, procurement, cost reduction and control, systems analysis, statistical quality control, planning and scheduling work flow. Introduction to quantitative methods; simulation, queuing theory, network models, linear programming.

Prerequisite: Accounting 2362, Management 3303, Business Administration 3333.

4335 Business Policy. (3-0) An integrated course in business policy utilizing the case study method. Emphasis on managerial decision-making through selection and application methods from behavioral sciences and quantitative studies.

Prerequisite: Accounting 2362, Business Administration 3333, Finance 3312, Management 3303, Marketing 3343.

4336 Problems of Small Business Management. (3-0) Analysis of the problems and decisions involved in starting a small business enterprise. The procedure for implementing a going-concern is emphasized.

Prerequisite: Management 3340.

4371 Social Responsibility of Business. (3-0) An integration of a number of disciplines and value systems which affect and determine the proper role of business in satisfying the needs of customers, creditors, community, government, stockholders, managers, employees, suppliers, and society in general.

Prerequisite: Management 3303, or consent of chairman.

4373 Personnel Management. (3-0) Personnel management in business, government, and industry; the personnel department; personnel policies and programs; various personnel management functions with emphasis on such functions as staffing, appraisals and retaining, and salary administration.

Prerequisite: Management 3303, or consent of chairman.

4375 Human Relations in Business. (3-0) An analysis of relations of individuals and groups within organizations, integrating concepts drawn from psychology, sociology, philosophy, scientific management, and communication theory. Specific attention is given to leadership, motivation, communication, employee supervision and morale.

Prerequisite: Management 3303, or consent of chairman.

4377 Labor Relations and Collective Bargaining. (3-0) A study of labor unions and their impact upon private and public sector employment; includes a study of the growth and development of unions, government of unions, the collective bargaining process, labor law, contract negotiation and administration, and mediation and arbitration procedures.

Prerequisite: Management 4373, or consent of chairman.

Courses in Marketing

3343 Marketing. (3-0) Major emphasis is placed on the function involved in the marketing process. An understanding of the role of the consumer, the marketing institution, and the social and legal environment is emphasized.

Prerequisite: Accounting 2362, or consent of chairman.
3355 Retailing. (3-0) Principles of retailing; basic practices and procedures; location and layout; purchasing, pricing, promotion, and credit management; other basic considerations in retail operations.
   Prerequisite: Accounting 2361, Marketing 3343.

3357 Sales and Sales Management. (3-0) Principles and techniques of selling considered from the viewpoint of both buyer and seller. Consideration of the individual salesman and the organization of sales forces. Study of the problems confronting the sales manager and policies of sales management.
   Prerequisite: Marketing 3343.

3367 Promotional Strategy. (3-0) Analysis of the promotional methods in marketing; advertising, selling and sales promotion; their coordination and relationship to other business functions.
   Prerequisite: Marketing 3343.

4320 Marketing Research. (3-0) Nature and scope of marketing research; marketing research procedures and techniques; planning the research; data collection; sampling; analysis; other basic factors in marketing research. Not offered during summer terms.
   Prerequisite: Accounting 2362, Business Administration 3333, Marketing 3343.

4321 Consumer Purchasing and Motivation. (3-0) The consumer's role in marketing structure. Patterns of consumer expenditure and the psychological, economic, and social forces that underlie such patterns.
   Prerequisite: Accounting 2362, Marketing 3343.

4337 Marketing Management. (3-0) The work of management in distributive enterprises in planning, organizing, directing, coordinating, and controlling activities involved in the administration of a marketing program.
   Prerequisite: Accounting 2362, Business Administration 3333, Marketing 3343.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
School of Creative Arts

J. Ralph Harrel, Ed.D., Dean

Department of Art ...................... Brian G. Row, M.F.A., Chairman
Department of Music .................... Arlis J. Hiebert, Ph.D., Chairman
Department of Speech Communication and Theatre Arts .................... T. Richard Cheatham, Ph.D., Chairman
Department of Art

Brian G. Row, Associate Professor and Chairman
Professors: Kolbe, Marlow, Suckle
Associate Professors: Nielsen, Sawyer, Wortham
Assistant Professors: F.L. Henry, Kritselis, J.B. Laman, Newman, Weller, T.C. Williams, R.N. Wilson
Instructors: Adams, C.C. Anderson, Erwin, Greer, Harris, Todd

Special Requirements

Art majors are required to participate in the annual Student Exhibition and other exhibits, programs, and courses. All senior art majors who plan to graduate within the current academic year (end of the Fall, Spring, or Summer Sessions), are required to submit pieces of their work for inclusion in the senior show.

Academic Foundations

Notes:

1. In Academic Foundations, options exist and should be discussed with your adviser, and/or by referring to the catalog under the specific department to which the requirements apply.
2. Requirements in Academic Foundations specify a minimum of 47 semester hours credit for the Bachelor of Fine Arts degree, and a minimum of 56 semester hours for the Bachelor of Science in Education degree.

Academic Foundations Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>History 1310, 1320</td>
<td>6</td>
</tr>
<tr>
<td>Political Science 2310, 2320</td>
<td>6</td>
</tr>
<tr>
<td>English 1310, 1320</td>
<td>6</td>
</tr>
<tr>
<td>Theatre Arts or Music 3213 (or 2300)</td>
<td>2-3</td>
</tr>
<tr>
<td>Philosophy 3201 (or 1305)</td>
<td>2-3</td>
</tr>
<tr>
<td>Science, Mathematics, or Modern Language (from two fields)</td>
<td>12-16</td>
</tr>
<tr>
<td>English (literature)</td>
<td>6</td>
</tr>
<tr>
<td>Speech Communication 1310</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education activity</td>
<td>4</td>
</tr>
<tr>
<td>Other courses (maximum in art, six semester hours)</td>
<td>3-9</td>
</tr>
</tbody>
</table>

47-53

Bachelor of Science in Education Degree
(128 semester hours; includes certificate)

All-level Certificate

Notes:

1. The degree plan requires a minimum of 56 semester hours in Academic Foundations. An increase in this number would decrease the number of elective hours.
2. Forty-eight semester hours in art are required.
3. A total of 40 upper division hours (junior/senior courses) are required for graduation.
4. Certification is in art only.
5. Art 4323 must be completed prior to enrolling in student teaching.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1314, 1321, 1354, 2383</td>
<td>12</td>
<td>Art 2310 (or 2331), 2321, 2359, 2370</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Hours</th>
<th>Senior Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 3322, 3323, 3327, 3337 (or 4337), 3365</td>
<td>15</td>
<td>Art 4323, six advanced hours of art history</td>
<td>9</td>
</tr>
<tr>
<td>Education 3312, 3330</td>
<td>6</td>
<td>Education 3320, 4331 (or 4332), 4380, 4381, Elective</td>
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</tr>
<tr>
<td>Elective</td>
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</tbody>
</table>

**Bachelor of Science in Education Degree (128 semester hours; includes certificate)**

**Secondary Certificate**

**Notes:**

1. The degree plan requires a minimum of 56 semester hours in Academic Foundations.
2. Thirty hours in art are required.
3. A total of 40 upper division hours (junior/senior courses) are required for graduation.
4. A second teaching field must be completed.
5. Art 4323 must be completed prior to enrolling in student teaching.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1314, 1321</td>
<td>6</td>
<td>Art 1354, 2310 (or 2331)</td>
<td>6</td>
</tr>
<tr>
<td>Second teaching field</td>
<td>6</td>
<td>Second Teaching field</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Hours</th>
<th>Senior Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 2321 (or 2370), 2359</td>
<td>6</td>
<td>Art 3327 (or 3322), 3337 (or 3365), 4323, plus three advanced hours of art history</td>
<td>12</td>
</tr>
<tr>
<td>Second teaching field</td>
<td>6</td>
<td>Second teaching field</td>
<td>6</td>
</tr>
<tr>
<td>Education 3312, 3330</td>
<td>6</td>
<td>Education 4331, 4332, 4681</td>
<td>12</td>
</tr>
</tbody>
</table>

**Bachelor of Fine Arts in Studio or Commercial Art (128 semester hours)**

**Notes:**

1. The degree plans require a minimum number of 47 semester hours in Academic Foundations. An increase in this number will decrease the number of elective hours.
2. A total of 40 upper division hours (junior/senior courses) are required for graduation.
3. For the Bachelor of Fine Arts degree in Studio Art, a minimum of 18 semester hours are required within an area of specialization: ceramics, jewelry, painting, printmaking, sculpture, or textiles.
4. A student is officially accepted into one of the Bachelor of Fine Arts Programs upon completion of the freshman and sophomore year art classes (see outline below) with a minimum grade-point average of 3.0 in art classes. A student with a grade-point average below 3.0, upon completion of the above requirements, may submit a portfolio to their respective Degree Review Committee. Upon the Committee's recommendation, and the approval of the departmental chairman, the student may then receive official acceptance (upon completion of any deficiencies) into one of the Bachelor of Fine Arts Programs.

A transfer student is eligible for acceptance into one of the Bachelor of Fine Arts Programs upon completion of the Southwest Texas State University freshman and sophomore year Department of Art requirements, or the equivalent of those requirements as certified by the Chairman of the Department of Art. A transfer student must present a transcript of previous work as well as his portfolio to his respective Degree Review Committee. Upon the committee's recommendation, and the approval of the departmental chairman, a transfer student may receive formal acceptance (upon completion of any deficiencies) into one of the Bachelor of Fine Arts Programs.

Upon completion of the preceding stipulations, all Bachelor of Fine Arts candidates will receive written notice of their official acceptance with any noted deficiencies or rejection.

5. A student's choice of art electives must be approved in writing first by their faculty adviser, or Chairman of the Degree Committee, and then by the Chairman of the Department of Art.

6. Depending on their professional goals and aptitudes, students may elect to take a limited number of courses outside the Department of Art in lieu of art electives. Before registering for such courses, a student must receive written approval; first, from the Chairman of the Degree Review Committee, and secondly, the Chairman of the Department of Art.

7. For the Bachelor of Fine Arts degree with a major in Studio Art, it is highly recommended that a minimum of 18 semester hours in art history be taken by students planning to pursue a graduate degree in art.

### Bachelor of Fine Arts (Studio Art Concentration)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1314, 1321, 1354, 2331, 2383</td>
<td>15</td>
<td>Art 2310, 4373, 4383; choose one from each group (2321, 2359, 2370), (3322, 3327, 3337, 3365)</td>
<td>15</td>
</tr>
<tr>
<td>Junior Year</td>
<td>Hours</td>
<td>Senior Year</td>
<td>Hours</td>
</tr>
<tr>
<td>Art electives</td>
<td>18</td>
<td>Art electives</td>
<td>21</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
<td>Electives (may be art courses)</td>
<td>6</td>
</tr>
</tbody>
</table>

### Bachelor of Fine Arts (Commercial Art Concentration)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1314, 1321, 2331, 2354, 2383</td>
<td>15</td>
<td>Art 2310, 2321, 2359, 2366, 4373, 4383</td>
<td>18</td>
</tr>
<tr>
<td>Industrial Arts 1450</td>
<td>4</td>
<td>Industrial Arts 2365</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Arts Degree
(128 semester hours)

Notes:

1. The degree plan requires a minimum of 56 semester hours in Academic Foundations with specific requirements in science and modern language as indicated in the section of the catalog stating requirements for a Bachelor of Arts degree. Students should consult with the Chairman of the Department of Art before registering for Academic Foundations courses in order to select the options best suited to their particular program.

2. Thirty semester hours of art courses are required. Six additional semester hours are strongly recommended.

3. A minor is required.

4. Forty semester hours of upper division courses are required.

Bachelor of Science in Commercial Art
(128 semester hours — phase out program)

Notes:

1. Recommended electives for commercial art majors include these: Marketing 3357 and Psychology 2301.

2. In addition to the required art courses, 18 semester hours must be completed in Industrial Arts/Journalism as follows:
   (a). Industrial Arts 2365, 3365.
   (b). Industrial Arts 1450 or Journalism 1450.
   (c). Industrial Arts 3350 or Journalism 2350.
   (d). Six hours from the following: Industrial Arts 3310, Journalism 3310, 3319, 3367, 3368, 4307, 4317, 4318, 4327.

   Six additional semester hours may be taken in art, and six semester hours in industrial arts or journalism.
Freshman Year

| Art 1314, 1321, 1373 | 9 |
| Art 1310, 1320 | 6 |
| History 1310, 1320 | 6 |
| Science, Mathematics, or Modern Language | 6-8 |
| Speech Communication 1310 | 3 |
| Physical Education activity | 2 |

Sophomore Year

| Art 1354, 2310, 2354, 2359 | 12 |
| Industrial Arts or Journalism | 3 |
| English (literature) | 6 |
| Government 2310, 2320 | 6 |
| Science, Mathematics, or Modern Language | 6-8 |
| Physical Education activity | 2 |

Junior Year

| Art 2366, 2383, 3310, 3311, 3359 | 15 |
| Industrial Arts or Journalism | 6 |
| Philosophy 3201 (or 1305) | 2-3 |
| Music 3213 or Theatre Arts 3213 (or 2300) | 2-3 |
| Electives | 6 |

Senior Year

| Art 3321, 4310, 4311, 4370 | 12 |
| Industrial Arts or Journalism | 6 |
| Electives | 9 |

Minors in Art

Under the curriculum for elementary teachers a specialization may follow the outline of Plan I or Plan II, shown in the section of the catalog stating requirements for education.

See section of catalog stating requirements for a second teaching field in art.

See section of catalog stating requirements for an art minor, with no certification.

Courses in Art

Note: All art courses require out-of-class work.

1314 Basic Design. (3-3) Introduction to the elements and principles of design with two-dimensional problems in a variety of techniques and media. (Core Curriculum: Design I.)

1321 Basic Drawing. (3-3) Emphasis on drawing natural and man-made forms. The student is encouraged to question and explore his sensory responses with basic pictorial expression. (Core Curriculum: Drawing I.)

1354 Design in 3-D Material for the Elementary Teacher. (3-3) A course for sensitizing the student to elements and principles of design using the materials of the environment to experiment and make objects of art. (Core Curriculum: Design II.)

1373 Introduction to the Visual Arts. (3-0) Introductory course leading to an understanding of the visual arts (painting, architecture, sculpture). (Core Curriculum: Art Appreciation.)

2300 The Arts in Society. (3-0) A systematic review of the creative process in the arts and its effect on life. Art majors will take Theatre Arts or Music 2300.

2310 Introduction to Figure Drawing. (3-3) This course will grant the student opportunity to explore and inquire rather than teach a method of drawing. (Core Curriculum: Drawing II.)
Prerequisite: Art 1314, 1321.

2313 The Folk Arts of America. (3-0) A presentation of historic and contemporary folk arts of America; includes ethnic folk arts of dance, music, and drama, with an emphasis upon regions of Texas and the Southwest.

2321 Introduction of Painting. (3-3) A beginning course in painting with oils and acrylics; exploring potentials of painting media with emphasis upon color and composition.
Prerequisite: Art 1314, 1321.
2331 Advanced Drawing. (3-3) Continued individual development and exploration of media and concepts in drawing. (Core Curriculum: Drawing III)
Prerequisite: Art 1314 and 1321.

2354 Design. (3-3) An investigation of problems in 3-D design, including interpretation of form, color, light, and time. (Core Curriculum: Design III)
Prerequisite: Art 1314.

2359 Printmaking. (3-3) An introductory study into the various techniques of printmaking. (Core Curriculum: Printmaking I.)
Prerequisite: Art 1314, 1321.

2366 Lettering. (1-5) Basic letter styles studied through free-hand and mechanical methods with application to commercial art.
Prerequisite: Art 1314.

2370 Watercolor I. (3-3) An introductory watercolor course stressing the Aquarelle approach.
Prerequisite: Art 1321.

2383 Current Trends in Art. (3-0) Study of contemporary trends in art.

3213 Introduction to the Fine Arts. (2-0) A study of the interrelation of art with music and drama. Art majors will take Theatre Arts or Music 3213.

*3310 Figure Drawing. (3-3) Further experimentation and search for individual interpretation. (Core Curriculum: Drawing III.)
Prerequisite: Art 2310.

*3311 Advertising Design I. (3-3) Design problems for various graphic communications media with emphasis on layout and the poster.
Prerequisite: Art 1314, 2366.

*3321 Painting Studio. (3-3) Students will be encouraged to pursue and develop individualized projects in painting with criticism directed toward content, expression, subject, and technical processes. (Core Curriculum: Painting II.)
Prerequisite: Art 2321.

*3322 Sculpture. (3-3) Fundamental approaches to methods of designing and producing three-dimensional form and space. (Core Curriculum: Sculpture I.)
Prerequisite: Art 1354 (or 2354).

3323 Art for the Elementary Teacher. (3-3) Art theory and experiences as used in the elementary classroom which contribute to the education process. Research, structure, and development toward a personal philosophy presenting art.
Prerequisite: Art 1354.

*3327 Ceramic Methods. (3-3) Exploration of construction methods and glazes. (Core Curriculum: Ceramics I.)
Prerequisite: Art 1354 (or 2354).

*3337 Textile Design: General. (3-3) Explores the nature of fibers in relation to their use in textile design. Affords experience with woven and non-woven textile techniques with special emphasis on structural and applied design. (Core Curriculum: Handweaving I.)
Prerequisite: Art 1354 (or 2354).

*3359 Advanced Printmaking. (3-3) Intensive study with emphasis on specialization in printmaking techniques. (Core Curriculum: Printmaking II.)
Prerequisite: Art 2359.

*3365 Jewelry I. (3-3) Introductory course in metal craft and jewelry. Design and execution of contemporary jewelry and enameling. (Core Curriculum: Art Metal I.)
Prerequisite: Art 1354 (or 2354).

*May be repeated with different emphasis for additional credit.
**4310 Graphic Illustration.** (3-3) Problems in illustration with a study of techniques in color suitable for graphic reproduction. (Core Curriculum: Drawing IV)

Prerequisite: Art 3310 or 3321.

**4311 Advertising Design II.** (3-3) Continuation of Art 3311 with emphasis on trademark and package design.

Prerequisite: Art 3311.

**4317-4617 The Practicing Commercial Artist.** (0-6/12) A capstone course for advanced commercial art students. The student is assigned to a commercial agency of printing, advertising, design, or merchandising for apprenticeship training. Offered on an individual basis.

**4321 Painting.** (3-3) Offers exploratory opportunity for creation of personal imagery. (Core Curriculum: Painting III.)

Prerequisite: Art 3321.

**4322 Sculpture Technology.** (3-3) Intensive study of sculpture techniques, methods, and materials. Emphasis is placed on space and size problems. (Core Curriculum: Sculpture II.)

Prerequisite: Art 3322.

**4323 Art for the Junior-Senior High School.** (3-3) A seminar utilizing lecture, discussion of problems stemming from student-teacher experiences.

**4327 Ceramic Technology.** (3-3) Intensive study of ceramic glazes, clay bodies, and production. (Core Curriculum: Ceramics II.)

Prerequisite: Art 3327.

**4337 Textile Design: Weaving.** (3-3) Developing proficiency in the use of simple and complex weaving devices. Approaching design through the inherent qualities of the materials. Experimentation in the use of applied design to loomed fabrics. (Core Curriculum: Handweaving II.)

Prerequisite: Art 1354.

**4363 An Honors Course in Special Problems in Art or Crafts.** (3-3) Intensive work of an individual character. The subject is determined by the grade-points, interests, and quality of art work of the student, and approval of the chairman of the department.

Prerequisite: Six hours in art and junior standing.

**4365 Jewelry II.** (3-3) Design problems in precious metals, including construction, casting, and setting of stones.

Prerequisite: Art 3365.

**4370 Watercolor Painting.** (3-3) Orientation to water base paints with an emphasis on Aquarelle. (Core Curriculum: Painting III.)

Prerequisite: Art 2370.

**4373 Ancient and Medieval Art History.** (3-3) A cultural study through the visual arts. (Core Curriculum: Art History Survey I.)

**4383 History of Art III.** (3-0) A study of the art epochs from 1800 to the present, including romanticism, realism, impressionism, and other contemporary movements. (Special emphasis is placed on art in the United States.) Field Trips. (Core Curriculum: Art History Survey II.)

**4393 Pre-Columbian Art.** (3-0) Survey of the Pre-Columbian arts of the Americas.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.

*May be repeated with different emphasis for additional credit.*
Department of Music

*Arlis J. Hiebert, Professor and Chairman

Professors: Belisle, Bowles, Harrel

Associate Professors: Callahan, Ham (Wayne), Pino, Reynolds, Riepe, Sudduth, Whalin, **Wolverton


Instructors: Henrikson, Herbert, Holl, Linard, Peterman, Sergi, Whitlock

The Department of Music offers degree programs in music education and musical performance. In addition to professional training, the department provides opportunities for University students to develop musical skills and understanding. Music majors take the Bachelor of Music degree and elect tracks in Music Education (Provisional All-level or Secondary Certification) or Performance. Music minors should refer to the catalog section entitled “Requirements for Minors (No Certificate),” and elementary education majors, seeking music certification, should refer to the two plans listed under the Department of Education.

All students enrolled at Southwest Texas State University are urged to seek membership in the various performing organizations: Bands, choirs, stage bands, madrigal singers, other ensembles and to participate in music theatre productions.

Non-majors may elect instruction in piano, voice, organ, and band and orchestral instruments. Class lessons are available in some of these areas. Non-majors are taught at their own level of achievement.

The following courses are open to non-majors as electives: Music 1311, 1312, 1411, 1412, 2461, 2462, 3213, 3255, 3314, 3320, 3335, 3350, 4313, 4360, all applied music and all ensembles.

Departmental Policies

A person making a career in the field of music must have a high level of musical skill and understanding. In order to assist in establishing musical skills for counseling and placement, the Department of Music has evolved several examinations taken by all music majors.

Entrance Auditions. All entering music majors must perform a placement audition in applied music. The audition must be performed before registering for applied music.

Music Theory Examinations. All new music majors must take an examination in music theory for the purpose of being assigned to the appropriate music theory class.

Applied Music Examinations. Music majors and minors enrolled for applied music will perform before a faculty committee at the end of each semester. Students who fail to appear for the scheduled examination will receive “F” for the course. In case of illness or emergency, a grade of “I” (incomplete) will be given, and the examination will be re-scheduled at the beginning of the next term.

Keyboard Proficiency. All voice and keyboard students must pass the piano proficiency examination before enrolling for student teaching. Piano proficiency requirements are available on request.

*Faculty Development Leave, Spring, 1980.
**Acting Chairman, Spring Semester, 1980.
Upper Level Review. The Upper Level Review is conceived as a process whereby music major students can be assisted and encouraged in choice and pursuit of the most suitable career. On completion of four semesters of music theory (1411, 1412, 2461, 2462 or equivalent), or four long-term semesters of private lessons in a major performance area, whichever comes first, the total musical performance, music, and academic records will be reviewed by the music faculty. This review will be completed before the processing of a degree outline and permission to enroll for 3000 level courses in applied music. The Upper Level Review will be scheduled at the end of each semester. Specific information concerning the Upper Level Review is available upon request. Students should work closely with their applied music teacher in the major performance area and music theory instructors in the semester of the review.

Transfer students with four or more semesters of applied music study may elect the review upon entering Southwest Texas State University. Transfer students with four or more semesters of applied study must complete the review at the end of the first semester of applied music study at Southwest Texas State University.

A senior recital is required on both undergraduate degree programs. The Senior Recital may not be presented until the student is enrolled in 4000 or senior level applied music.

Students failing the piano proficiency examination or who are not recommended for Junior Standing (3000 level courses) in the major applied music area should continue to enroll for lessons in the area of performance study affected until the proficiency level is acquired.

Recital Attendance Requirements. Each semester a variety of recitals and concerts are presented by students, faculty, and visiting artists. Attendance at such programs is an indispensable part of a musical education. All music majors and music minors studying applied music must attend a minimum number of events each semester. The exact number may vary from semester to semester, and will be announced at the beginning of each term. Failure to attend the minimum number of events during a semester will result in the lowering of the grade in the major performance area. In addition, applied music teachers may require attendance at all recitals in the individual performance area of each student.

Ensemble Requirements. All music majors must participate in a major ensemble (choir or band) each semester. At the discretion of their primary applied teacher, majors and minors may participate in small ensembles (stage band, madrigals, and other small groups).

Ensembles

University Bands. During the fall semester the band is primarily a marching unit, and performs at all home football games. On the basis of individual auditions, this group is divided into smaller groups which function as concert bands late in the fall semester and during the spring semester (one credit per semester).

University Chorale. A select concert-touring choir of approximately 45 to 55 members chosen by audition from the entire University student body (one credit per semester).

Concert Choir. A select choir for singers not in the Southwest Texas State University Chorale. Members are chosen by audition from the entire student body (one credit per semester).

University Chorus. Open to any student interested in singing. This choir requires no audition; however, a brief conference with the director is desirable (one credit per semester).
University Chamber Orchestra. A group open to qualified students as well as faculty and community persons who play stringed, wind, and percussion instruments. The repertory for this group consists of the standard small orchestra literature, oratorio, concerto, and opera accompaniments (one credit per semester).

Jazz Bands. The Jazz Bands play special arrangements of contemporary popular music in a variety of styles. An entrance audition is required (one credit per semester).

Madrigal Singers. A small group of select singers capable of performing both as an ensemble and as soloists. The group will perform traditional and contemporary madrigal and chamber vocal repertoire (one credit per semester).

Opera Ensemble. Designed to provide opportunities for singers to participate in performance of opera and to learn techniques for operatic acting and staging. A major performance with orchestra is scheduled annually (one credit per semester).

Brass Choir. A performing ensemble for serious brass students. Membership is determined by audition or conference with director and private instructor (one credit per semester).

Trombone Ensemble. A performing group made up of both music majors and non-majors. Membership is by consent of the director (one credit per semester).

Chamber Ensembles. Each semester small brass, woodwind, and percussion ensembles are organized (one credit per semester).

Bachelor of Music Education Degree
(128 semester hours: includes certificate)
Secondary Certification (Phase out Program)

Notes:

1. The music major requires 48 semester hours as a minimum, although frequently students will find it necessary to take the permissible maximum of 54 hours.
2. No minor is required with this program.
3. Music majors should consider attending summer school at some time during the four years of study.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music primary performance area¹</td>
<td>2-4</td>
<td>Music primary performance area¹</td>
<td>2-4</td>
</tr>
<tr>
<td>Music secondary performance area²</td>
<td>2</td>
<td>Music secondary performance area²</td>
<td>2</td>
</tr>
<tr>
<td>Music 1411, 1412</td>
<td>8</td>
<td>Music 2461, 2462</td>
<td>8</td>
</tr>
<tr>
<td>Music Ensemble³</td>
<td>2</td>
<td>Music 2203, 2204</td>
<td>4</td>
</tr>
<tr>
<td>English 1310, 1320</td>
<td>6</td>
<td>Music Ensemble³</td>
<td>2</td>
</tr>
<tr>
<td>Speech Communication 1310</td>
<td>3</td>
<td>English (literature)</td>
<td>6</td>
</tr>
<tr>
<td>Science, Mathematics, or Modern Language</td>
<td>6-8</td>
<td>History 1310, 1320</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education activity or Band³</td>
<td>0-2</td>
<td>Physical Education activity or Band³</td>
<td>0-2</td>
</tr>
<tr>
<td>29-35</td>
<td></td>
<td>30-34</td>
<td></td>
</tr>
</tbody>
</table>

¹Two credits are recommended each semester.
²If primary area is voice, secondary area will be piano. If primary area is an orchestral instrument, secondary area will be other orchestral instruments (brass, woodwinds, strings, and percussion classes); in addition, piano study is recommended. If primary area is piano, secondary area can be either voice or orchestral instruments, depending on vocational goals.
³Choir or Band. Four semesters in marching band will fulfill the physical education requirement; however, four hours additional in Academic Foundations must be taken. All music majors must participate in a major ensemble each semester. Of 128 semester hours required for graduation, 40 hours must be advanced. Of these, 18 music hours must be advanced.
### Bachelor of Music

#### Secondary Certification

**Notes:**

1. The music major, music education track, requires 48 semester hours as a minimum. However, most students will find it necessary to take the permissible maximum of 54 hours.
2. No minor is required with this program.
3. Music majors should consider attending summer school at some time during the four years of study.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music primary performance area(^1)</td>
<td>2-4</td>
<td>Music primary performance area(^1)</td>
<td>2-4</td>
</tr>
<tr>
<td>Music secondary performance area(^2)</td>
<td>2</td>
<td>Music secondary performance area(^2)</td>
<td>2</td>
</tr>
<tr>
<td>Music 1411, 1412</td>
<td>8</td>
<td>Music 2461, 2462</td>
<td>8</td>
</tr>
<tr>
<td>Music Ensemble(^3)</td>
<td>2</td>
<td>Music Ensemble(^3)</td>
<td>2</td>
</tr>
<tr>
<td>English 1310, 1320</td>
<td>6</td>
<td>English (literature)</td>
<td>6</td>
</tr>
<tr>
<td>Speech Communication 1310</td>
<td>3</td>
<td>History 1310, 1320</td>
<td>6</td>
</tr>
<tr>
<td>Science, Mathematics, or Modern Language</td>
<td>6-8</td>
<td>Physical Education activity or Band(^3)</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education activity or Band(^3)</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>31-35</strong></td>
<td></td>
<td><strong>32-34</strong></td>
</tr>
</tbody>
</table>

\(^1\)Two credits are recommended each semester.

\(^2\)If primary area is voice, secondary area will be piano. If primary area is an orchestral instrument, secondary area will be other orchestral instruments (brass, woodwinds, strings, and percussion classes); in addition, piano study is recommended. If primary area is piano, secondary area can be either voice or orchestral instruments, depending on vocational goals.

\(^3\)Choir or Band. Four semesters in marching band will fulfill the physical education requirement; however, four hours additional in Academic Foundations must be taken. All music majors must participate in a major ensemble each semester. Of 128 semester hours required for graduation, 40 hours must be advanced. Of these, 16 music hours must be advanced.
Bachelor of Music
All-level Certification

Notes:
1. The music major requires 48 semester hours as a minimum, although
frequently students will find it necessary to take the permissible maximum of 54 semester hours.
2. No minor is required with this program.

Freshman Year Hours Sophomore Year Hours
Music primary performance area\(^1\) 2-4 Music primary performance area\(^1\) 2-4
Music secondary performance area\(^2\) 2 2
Music 1411, 1412 8 8
Music ensemble\(^3\) 2 2
English 1310, 1320 6 6
History 1310, 1320 6 6
Mathematics, Science, or Modern Language 6-8 6-8
Physical Education activity or Band\(^3\) 2 2

34-38 35-39

1Two credits are recommended each semester.
2If primary area is voice, secondary area will be piano. If primary area is an orchestral instrument, secondary area will be other orchestral instruments (brass, woodwinds, strings, and percussion classes); in addition, piano study is recommended. If primary area is piano, secondary area can be either voice or orchestral instruments, depending on vocational goals.
3Choir or Band. Four semesters in marching band will fulfill the physical education requirement; however, four hours additional in Academic Foundations must be taken. All music majors must participate in a major ensemble each semester. Of 128 semester hours required for graduation, 40 hours must be advanced. Of these, 18 music hours must be advanced.
### Bachelor of Music

(Performance)

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Hours</th>
<th>Senior Year</th>
<th>Hours</th>
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<tbody>
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<td>Music primary performance area</td>
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<td>Music primary performance area</td>
<td>2-4</td>
</tr>
<tr>
<td>Music 3315, 3316</td>
<td>6</td>
<td>Music 3353, 3369</td>
<td>6</td>
</tr>
<tr>
<td>Music 3217, 3227</td>
<td>4</td>
<td>Music ensemble</td>
<td>0</td>
</tr>
<tr>
<td>Music ensemble</td>
<td>0</td>
<td>Music recital</td>
<td>0</td>
</tr>
<tr>
<td>Education 3312, 3320</td>
<td>6</td>
<td>Art or Theatre Arts 3213 (or 2300)</td>
<td>2-3</td>
</tr>
<tr>
<td>Philosophy 3201 (or 1305)</td>
<td>2-3</td>
<td>Electives (non-music)</td>
<td>8</td>
</tr>
<tr>
<td>Political Science 2310, 2320</td>
<td>6</td>
<td>Education 3330, 4331 or 4332, 4380, 4381</td>
<td>12</td>
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<td></td>
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<tr>
<td>32-35</td>
<td></td>
<td>31-34</td>
<td></td>
</tr>
</tbody>
</table>

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**Freshman Year**

- English 1310, 1320: 6 hours
- Modern Language or Mathematics: 6-8 hours
- Music 1411, 1412: 8 hours
- Major performance area: 4 hours
- Secondary performance area: 2 hours
- Ensemble: 2 hours
- Physical Education activity or Band: 0-2 hours

<table>
<thead>
<tr>
<th>Hours</th>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-32</td>
<td>English 1310, 1320</td>
<td>6</td>
<td>History 1310, 1320</td>
</tr>
<tr>
<td>36</td>
<td>Modern Language or Mathematics</td>
<td>6-8</td>
<td>Physics 1310, 1320</td>
</tr>
<tr>
<td></td>
<td>Music 1411, 1412</td>
<td>8</td>
<td>Music 2461, 2462</td>
</tr>
<tr>
<td></td>
<td>Major performance area</td>
<td>4</td>
<td>Music 2203, 2204</td>
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</tr>
<tr>
<td></td>
<td>Ensemble</td>
<td>2</td>
<td>Secondary performance area</td>
</tr>
<tr>
<td></td>
<td>Physical Education activity or Band</td>
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<td>Physical Education activity or Band</td>
</tr>
</tbody>
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**Sophomore Year**

- English (literature): 6 hours
- Speech Communication 1310 (Voice majors, or Theatre Arts 1254): 2-3 hours
- Art, or Theatre Arts 3213 (or 2300): 2-3 hours
- Music 3315, 3316: 6 hours
- Music 4330, 4336: 6 hours
- Music performance area: 6-8 hours
- Ensemble: 2 hours

**Junior Year**

- English (literature): 6 hours
- Speech Communication 1310 (Voice majors, or Theatre Arts 1254): 2-3 hours
- Art, or Theatre Arts 3213 (or 2300): 2-3 hours
- Music 3315, 3316: 6 hours
- Music 4330, 4336: 6 hours
- Music performance area: 6-8 hours
- Ensemble: 2 hours

**Senior Year**

- English (literature): 6 hours
- Speech Communication 1310 (Voice majors, or Theatre Arts 1254): 2-3 hours
- Art, or Theatre Arts 3213 (or 2300): 2-3 hours
- Music 3315, 3316: 6 hours
- Music 4330, 4336: 6 hours
- Music performance area: 6-8 hours
- Ensemble: 2 hours

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1. Two credits are recommended each semester.
2. Choir or Band: Four semesters in marching band will fulfill the physical education requirement; however, four hours additional in Academic Foundations must be taken. All music majors must participate in a major ensemble each semester. Of 128 semester hours required for graduation, 40 hours must be advanced. Of these, 18 music hours must be advanced.
Courses in Music
(History-Literature—Theory-Conducting)

1311, 1312 Fundamentals of Music. (3-0) Sight-singing, ear training, dictation, keyboard and written harmony, emphasizing diatonic chords, including creative writing in small instrumental and vocal forms and analysis.

1411, 1412 Theory (First Year). (3-2) A comprehensive study of the materials of counterpoint and harmony. The study is made through listening and observation of the literature; lessons in application include activities in singing, playing, dictation, composition, conducting, and analysis.

2141 Fundamentals of Diction in Singing. (1-1) A basic course in the pronunciation of singing in English, French, Italian, Spanish, and German, taught by the several members of the voice faculty with one lecture session and one laboratory period for practical application by students.

2203, 2204 Survey of Music Literature. (2-1) A study, through listening to recordings and personal performance, of the characteristic examples of music literature, with emphasis on a greater enjoyment and understanding. The aim of this course is to provide a rich background of experience with music in order that theoretical and applied study may be more meaningful.

2300 The Arts in Society. (3-0) A systematic review of the creative process in the arts and its effect on life. Special emphasis given to the Creative Arts. Music majors will take Art 2300 or Theatre Arts 2300.

2461, 2462 Theory (Second Year). (3-2) A continuation of the comprehensive approach used in Music 1411 and 1412, with an emphasis upon traditional forms and harmony using altered chords. In the second semester there is an emphasis upon twentieth century materials.
Prerequisite: Music 1412 or equivalent.

3207 Fundamentals of Conducting. (2-0) The fundamentals of baton technique.

3213 Introduction to the Fine Arts. (2-1) A study of the interrelation of music with art, and Theatre Arts. Music majors will take Art 3213 or Theatre Arts 3213.

3217 Instrumental Conducting. (2-0) An application of the principles of conducting to instrumental music, including score reading and problems of interpretation.
Prerequisite: Music 2462 or permission of instructor.

3227 Choral Conducting. (2-0) An application of the principles of conducting choral music, including score reading and problems in interpretation.
Prerequisite: Music 2462 or permission of instructor.

3255 Musical Instruments for the Elementary Teacher. (2-1) Basic skills on the guitar, recorder, autoharp, and rhythm instruments for classroom use by elementary teachers.
Prerequisite: Music 1311.

3314 An Introduction to the Arts of Mexico. (3-0) A survey course designed to acquaint the general student with the interrelation of the Arts of Mexico (art, drama, music, festivals, and ceremonies). May be taken as an elective.

3315, 3316 History and Analysis of Music. (3-0) A comprehensive musicianship approach to the study of music from the earliest times to the present using techniques of stylistic and structural analysis.
Prerequisite: Music 2203, 2204, or permission of instructor.
**3320 Introduction to Music Theatre.** (2-2) Techniques for performing and staging musical comedy and opera. Practical experience with University productions.

**3335 Methods and Materials of Teaching Piano.** (2-1) Survey of differing approaches to teaching piano, including class teaching in school situations. Practical experiences and demonstrations. Evaluation of materials and literature.

**3340 Music Activities in the Elementary School.** (3-0) The five phases of the music program in the elementary school: rhythmic activities, singing, playing simple instruments, listening, and creative activities; an examination of recently published materials in the field of music for the elementary grades.

**3341 The Music Program in the Secondary School.** (3-0) Activities which make up the music program in the secondary school: Band, orchestra, choir, and courses in general music, theory and music literature. Opportunities to observe students engaged in these activities are provided, and problems peculiar to small, medium, and large high schools are discussed.

**3350 Music Understanding and Listening.** (3-0) Not open to majors. Developing of musical understanding through readings, and directed listening with emphasis on aural recognition.

**3353 The Instrumental Music Program in the Secondary School.** (3-0) Organizing and administering the instrumental phase of the music program in the secondary school.

**3369 Teaching Music in the Middle and Junior High Schools.** (3-0) A study of organizing and teaching general music classes, elementary and junior high school choirs, and beginning instrumental groups.

**4150 Senior Recital.** (3-0) Preparation and performance of the senior recital for music majors.

**4250 Band Instrument Repair.** (2-1) A one-semester course designed to equip the prospective band director with the skills to make basic repairs on the various musical instruments.

**4314 Survey of Twentieth Century Music.** (3-0) Emphasis upon music of the modern period and its development from music of earlier periods. Numerous examples of vocal and instrumental works in both large and small forms are used to illustrate twentieth-century styles and trends.

**4330 Creative Musical Techniques.** (3-0) Principles of twentieth century musical techniques, orchestrations, and arranging, taught through individual projects in musical composition.

Prerequisite: Music 2462 or permission of instructor.

**4336 Eighteenth Century Counterpoint.** (3-0) A study to develop further skills in the comprehensive approach used in Music 2461 and 2462, with an emphasis upon contrapuntal analysis and writing and a continuation of ear training.

Prerequisite: Music 2462 or equivalent.

**4351, *4353 Problems in Music.** Study of one or more problems in music. Problems chosen may not duplicate the scope of another course offered for credit. The courses are conducted as seminars and are open to students on an individual basis by arrangement with the Chairman of the Department of Music.

**4360 Music in the United States.** (3-0) A survey of the music and musical development in this country from pre-Columbian times to the present. Folk music, popular music, and jazz will be considered as well as traditional and experimental styles.

Prerequisite: Music 2203-2204 or 3350, or permission of instructor.

* May be repeated for credit.

** May be repeated once with different emphasis for additional credit.
Applied Music

Private study of piano, voice, organ, string, brass, woodwind, and percussion instruments is available to all students of the University, on both beginning and advanced levels of instruction. Pre-registration with the music office in applied music is advisable.

Brass, Woodwinds, Percussion, Harpsichord
1106, 1206, 2108, 2208, 2308, 3110, 3210, 3310, 4112, 4212, 4312, 4412

Organ
1105, 1205, 2107, 2207, 2307, 3109, 3209, 3309, 3409, 4111, 4211, 4311, 4411

Voice
1103, 1203, 2105, 2205, 2305, 3107, 3207, 3307, 4109, 4209, 4309, 4409

Piano
1104, 1204, 2106, 2206, 2306, 3108, 3208, 3308, 3408, 4110, 4210, 4311, 4411

Basic techniques of playing brass, string, woodwind, and percussion instrument: 1111, 2113, 3115, 4117.

Piano Class — Development of piano technique and musical style in a class situation: 1108, 1110, 1112, 1114.

Voice Class — Development of vocal technique and musical style in a class situation: 1131, 2131.

Ensembles (One Credit Each)
Band 1111, 2111, 3111, 4111
Choir 1113, 2113, 3113, 4113
Chamber Music 1121, 2121, 3121, 4121
Stage Band 1117, 2117, 3117, 4117

Music Fees (In Addition to Registration Fees)
Private study in piano, organ, voice, band, or orchestral instruments:
Two (one-half hour) lessons per week .................. $35.00 per semester
One (one-half hour) lesson per week ................... 18.00 per semester
Class lessons in piano .................................. 10.00 per semester
Music practice room fee .............................. 2.00 per semester

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
Department of Speech Communication and Theatre Arts

T. Richard Cheatham, Professor and Chairman
John E. Clifford, Professor and Director of Theatre
Professors: Baergen, Barton, Coulson, Schilling
Associate Professors: Gratz, Munger, Rush, M.L. Williams
Assistant Professors: J.B. Benjamin, W.H. Dibrell, J.R. Edwards, S.P. Fitch, Flemming, Hargett, Harrell, Maganza, March, Salem, Swinton,
Instructors: Hambrick, Lysiak

Speech Communication and Theatre Arts

Speech Communication activities include participation in debate, oral interpretation and other forensic activities. Theatre Arts activities include participation in course-connected laboratories and special sections with emphasis in make-up, voice and movement, theatre shops, theatre management and public relations, and rehearsal and performance.

All theatre arts majors must participate in a theatre arts activity each semester, including summer terms, they are enrolled in the University. All theatre arts minors must participate each semester, including summer terms, they are enrolled in a theatre arts course.

Bachelor of Science in Education Degree
(128 semester hours, including certificate)

A first or second teaching field may be chosen in speech communication.

(Secondary certification in theatre arts is offered under the Bachelor of Fine Arts degree.)

An all-level specialization may be chosen in speech communication or theatre arts, of special interest to those preparing to teach in junior high school. For students following the curriculum for elementary teachers and wishing to elect one of the elementary education plans, which includes speech communication and theatre arts, see the section of the catalog dealing with the elementary curriculum.

Speech Communication

Notes:
1. A first teaching field in speech communication consists of a minimum of 30 semester hours, with at least 12 semester hours advanced.
2. A second teaching field of 24 semester hours (12 hours advanced) must be completed. Recommended fields are theatre arts, English, or one of the social sciences. If the second field is other than theatre arts, it is recommended that six hours of theatre arts be completed.
Freshman Year  |  Hours  | Sophomore Year  |  Hours  
---|---|---|---
Speech Communication, two courses from 1310, 1315, 1340  | 6  | Speech Communication 2325, 2330  | 6  
Second teaching field  | 3  | Second teaching field  | 3-6  
English 1310, 1320  | 6  | Political Science 2310, 2320  | 6  
History 1310, 1320  | 6  | Science, Mathematics, or Modern Language  | 6-8  
Science, Mathematics, or Modern Language  | 6-8  | Physical Education activity  | 2  
Physical Education activity  | 2  |  |  | 
29-31  |  |  |  

Junior Year  |  Hours  | Senior Year  |  Hours  
---|---|---|---
Speech Communication 3327  | 3  | Speech Communication 4310, and six hours advanced  | 9  
Speech Communication  | 6  | Second teaching field  | 6-9  
Second teaching field  | 6-9  | Education 4331, 4332, 4681  | 12  
Education 3312, 3330  | 6  | Electives  | 6  
Philosophy 3201 (or 1305)  | 2-3  |  |  | 
Art 3213 or Theatre Arts 3213 or Music 3213 (or 2300)  | 2-3  | 33-36  
Electives  | 6  |  |  | 
31-36  |  |  |  

In selection of the 12 semester hours of unspecified speech communication courses, Speech Communication 3315 and 3336 are strongly recommended. These 12 semester hours may be selected from any Speech Communication courses except 2320 and 3351; Speech Communication or Theatre Arts 1370, 2111, 3370, and 4370. A total of 12 semester hours must be advanced.

Bachelor of Science in Education Degree  
(128 semester hours, including certificate — Phase Out Program)  
Theatre Arts

Notes:

1. A first teaching field in theatre arts programs consists of a minimum of 36 semester hours, with at least 12 hours advanced.
2. A second teaching field of 24 semester hours (12 hours advanced) must be completed. Recommended fields are speech, English, art, history, journalism, or political science. If the second field is other than speech, it is recommended that six semester hours of speech and an additional six semester hours of drama be completed.
3. Theatre Arts majors who are not speech communication minors will substitute Theatre Arts 4310 for Speech Communication 4310, and omit Theatre Arts 3355 or 3367.
4. All theatre arts majors are required to participate in theatre production activities each semester and will, therefore, enroll in Theatre Arts 2111 each semester in residence at Southwest Texas State University except for the freshman year, the semester in which the student enrolls in Directed Teaching, and the semesters in which the student enrolls in Stage Lighting and/or Costuming.
### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Theatre Arts 1154A, 1154B, 1254, 1255, 1358</td>
<td>9</td>
</tr>
<tr>
<td>Speech Communication 1340</td>
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<tr>
<td>English 1310, 1320</td>
<td>6</td>
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<tr>
<td>History 1310, 1320</td>
<td>6</td>
</tr>
<tr>
<td>Science, Mathematics, or Modern Language</td>
<td>6-8</td>
</tr>
<tr>
<td>Physical Education activity (including Physical Education 1111A, theatre arts section)</td>
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**Total Hours:** 32-34

### Sophomore Year

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<th>Course</th>
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<tbody>
<tr>
<td>Theatre Arts 2338, 2354</td>
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<tr>
<td>Theatre Arts 2111, 2111</td>
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<tr>
<td>Second teaching field (or electives)</td>
<td>6-7</td>
</tr>
<tr>
<td>English (literature)</td>
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</tr>
<tr>
<td>Political Science 2310, 2320</td>
<td>6</td>
</tr>
<tr>
<td>Science, Mathematics, or Modern Language</td>
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**Total Hours:** 32-37

### Junior Year

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<th>Course</th>
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<tr>
<td>Theatre Arts 3344 or 3345, 3355 or *3367, 3357, 4364</td>
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<td>Second teaching field (or electives)</td>
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<tr>
<td>Art 3213 or Music 3213</td>
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<td>Philosophy 3201 (or 1305)</td>
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<tr>
<td>Theatre Arts 2111, 2111</td>
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<tr>
<td>Education 3312, 3330</td>
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**Total Hours:** 34-37

### Senior Year

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<tr>
<td>Theatre Arts 4365</td>
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<tr>
<td>Speech Communication 4310</td>
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<tr>
<td>Second teaching field (or electives)</td>
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</tr>
<tr>
<td>Education 4331, 4332, 4681</td>
<td>12</td>
</tr>
<tr>
<td>Theatre Arts 2111</td>
<td>0-1</td>
</tr>
</tbody>
</table>

**Total Hours:** 30-31

### All-level Speech Communication-Theatre Arts

A Bachelor of Science in Education degree may also be secured with 48 semester hours in speech communication and theatre arts, planned in consultation with the department chairman. A second teaching field is not required. Education courses for all-level certification are: Education 3312, 3320, 3330, either 4331 or 4332, and 4380, 4381.

### Bachelor of Arts Degree

**(128 semester hours)**

**Notes:**

1. A minimum of 30 semester hours in major, with six additional hours strongly recommended; courses selected according to individual needs, to include at least 12 semester hours advanced.
2. A minor must be completed. See the section of this catalog dealing with minors.
3. See section of catalog stating requirements for a Bachelor of Arts degree.
4. Bachelor of Arts speech communication majors who desire a teaching certificate must complete Speech Communication 4310.
5. Bachelor of Arts speech communication majors may elect to emphasize curricular offerings in the area of organizational communication. The organizational communication emphasis is offered exclusively for those speech communication majors electing the Bachelor of Arts degree programs that do not involve teacher certification, and for minors from other departments whose students are not seeking a teaching field in speech. The specialized curriculum in the organizational communication emphasis is designed to enhance the student's marketability in non-academic
careers, particularly those requiring skills in the management of human relationships and communication flow within contemporary business and professional organizations. Students electing a major or minor with the speech communication division will be required to take the following courses: Speech Communication 1315, 2320, 2330, 3319, 3327, 3338, and 4331. In addition to the preceding requirements, majors will elect nine semester hours from the following: Speech Communication 2325, 3317, 4315, 4345, and 4347. Students electing a minor in Speech Communication with the organizational communication emphasis will complete three hours from the list of elective courses. Application may be made to the Speech INTERNSHIP COMMITTEE for permission to enroll in Speech Communication 4315. Such enrollment will afford the student an opportunity to work in a communication related role in an organization. Normally, the student will be expected to work on the job for 90 to 120 hours for three semester hours of academic credit.

6. Bachelor of Arts theatre arts majors choose their area of specialization, after consulting with the Director of Theatre, from the following: Theatre Arts education (requires 18 semester hours of education for certification), Directing, Acting, Technical-Design, Playwriting, Children’s Theatre, or Theatre History and Criticism.

7. All theatre arts majors are required to participate in theatre production activities each semester, and will, therefore, enroll in Theatre Arts 2111 each semester in residence at Southwest Texas State University except for the freshman year, the semester in which the student enrolls for Directed Teaching, and the semesters in which the student enrolls for Theatre Arts 2338 and/or 3344.

### Theatre Arts

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
<th>Senior Year</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Theatre Arts 1154A, 1154B, 1254, 1255, 1358</td>
<td>9</td>
<td>Theatre Arts specialization (see note above)</td>
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<tr>
<td>Speech Communication 1340</td>
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<td>Theatre Arts 2111, 2111</td>
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<td>Theatre Arts 2111, 2111</td>
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<td>English 1310, 1320</td>
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<td>Philosophy 3201 (or 1305)</td>
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### Speech Communication

<table>
<thead>
<tr>
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<th>Sophomore Year</th>
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</tr>
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<tbody>
<tr>
<td>Speech Communication, two courses from 1310, 1315, 1340</td>
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<td>Speech Communication 2325 or 2330</td>
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<td>Minor</td>
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<td>English 1310, 1320</td>
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<td>Modern Languages</td>
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<th>Junior Year</th>
<th>Hours</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>Speech Communication 3315 or 3338, 3327</td>
<td>6</td>
<td>Speech Communication 3333 or 4314 or 4345</td>
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<td>Political Science 2310, 2320</td>
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The 12 semester hours of unspecified speech communication courses may be selected from any Speech Communication courses except 2320 and 3351; Speech Communication or Theatre Arts 2111, 3370, 4352, or 4370. Twelve semester hours must be advanced; for certification, 4310 must be included.

### Bachelor of Fine Arts With a Major in Theatre Arts

The Bachelor of Fine Arts degree contains two options: (1) an education curriculum leading to secondary certification, and (2) a special emphasis curriculum leading to a Pre-Professional degree in Theatre Arts.

### Pre-professional Option

(128 semester hours)

**Notes:**

1. A minimum of 60 semester hours in theatre arts, of which 33 are required. At least 30 semester hours must be advanced.
2. Students will be admitted to this option at the end of the sophomore year after passing an Admissions Interview/Audition with the Bachelor of Fine Arts Review Committee. Students will be expected to maintain high artistic and academic standards. For specific admission requirements and procedures, students should contact the Director of Theatre before March 15.
3. Bachelor of Fine Arts theatre arts students choose their area of specialization, in consultation with the Bachelor of Fine Arts Review Committee, from the following: Acting, Directing, Children's Theatre/Creative Dramatics, Costuming, Playwriting/History/Criticism, Technical/Design.
4. All theatre arts majors are required to participate in theatre production activities each semester and will, therefore, enroll in Theatre Arts 2111.
each semester in residence at Southwest Texas State University except for the freshman year, the semester in which the student enrolls for Directed Teaching, and the semesters in which the student enrolls for Theatre Arts 2338 and/or 3344.

5. Students desiring certification within the Pre-Professional Option will complete a fifth year of study, in which 18 hours of education courses and a second teaching field will be taken.

### Theatre Arts

<table>
<thead>
<tr>
<th>Freshman Year Hours</th>
<th>Sophomore Year Hours</th>
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<tr>
<td>Theatre Arts 1154A, 1154B, 1254, 1255, 1358, 2300 12</td>
<td>Theatre Arts 2111 0-2</td>
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<tr>
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<tr>
<td>History 1310, 1320 6</td>
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<td>Science, Mathematics, or Modern Languages 6-8</td>
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<td>Theatre Arts 4690, 4691 12</td>
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### Secondary Certification Option

(128 semester hours; including certificate)

### Theatre Arts

**Notes:**

1. A first teaching field in theatre arts programs consists of a minimum of 36 semester hours, with at least 12 hours advanced.
2. A second teaching field of 24 semester hours (12 hours advanced) must be completed. Recommended fields are speech communication, English, art, history, journalism, or political science.
3. Theatre Arts majors who are not speech communication minors will substitute Theatre Arts 4310 for Speech Communication 4310, and omit Theatre Arts 3355 or 3367.
4. All **theatre arts majors** are required to participate in theatre production activities each semester, and will, therefore, enroll in Theatre Arts 2111 each semester in residence at Southwest Texas State University except for the freshman year, the semester in which the student enrolls in Directed Teaching, and the semesters in which the student enrolls in Theatre Arts 2338 and/or 3344.
<table>
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<th>Freshman Year</th>
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32-34

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34-38

Courses in Speech Communication

1310 Fundamentals of Speech. (3-0) A first course in speech communication. Study aims at understanding of fundamentals of oral communication, and practice in employing the techniques involved. Students with extensive previous training in speech communication may be advised by the department to take a more advanced course, which will be substituted on any curriculum in the University which specifies Speech Communication 1310.

1315 An Introduction to Interpersonal Communication. (3-0) An introduction to materials exploring communication between two people. Emphasis on personal growth and on development of an analytic framework.

2320 Business and Professional Speech. (3-0) A course designed to give business and professional students the fundamentals of speech as used in communication situations such as interviews, group discussions, and public speaking.

2325 Argumentation and Debate. (3-0) A study of basic principles of argumentation emphasizing analysis, evidence, reasoning, and refutation and their applications in formal and informal debate contexts. Students will do laboratory work with the University forensic squad.

2330 Discussion. (3-0) A study of communication in the small group, including analysis of the influence of group structure, norms, roles, leadership, and climate on group process. Special emphasis on problem-solving discussion.

If speech communication is not the second teaching field, Theatre Arts 4310 is substituted for Theatre Arts 3355 or 3367, and three elective hours are substituted for Speech Communication 4310.
3317 General Semantics. (3-0) This course uses a variety of techniques to
demonstrate the effect that a concept or a particular word or set of words has on
human actions. These techniques include the study of writings in the area of
general semantics and the use of small group vocal and non-verbal activities.

3319 Introduction to Organizational Communication. (3-0) Examines the in-
fluence of communication on the entire organization. Special attention on supe-
rior/subordinate communication and methods for gathering data needed to co-
ordinate communication across work groups.

3327 Communication Theory. (3-0) A study of the process of human com-
munication. Included are considerations of speech as a behavioral science, ex-
aminations of models of communication, and exploration of the interdisciplinary
nature of interest in problems of human communication.

3333 Speech Criticism. (3-0) The judicious evaluation and criticism of major
public addresses, including the principles and methods, both historical and
modern, that make up the substance of the area of speech criticism.

3338 Public Communication. (3-0) A study of theory and practice employed
in preparation and presentation of the most typical types of public speeches.
Special attention given to development of personal public speaking skills.

3351 Speech Communication for the Sciences. (3-0) Training and practice
in preparing and delivering scientific papers, reports, seminars, talks, etc. May
substitute for Speech Communication 1310 for candidates for the Bachelor of
Science degree.

4313 Contemporary Studies in Public Address. (3-0) An in-depth study of a
current speech event. Topic for study each time the course is offered will be
announced before registration. A student may take the course twice for credit.

4314 Strategic Rhetoric. (3-0) An analysis of messages, speakers, communi-
cation strategies, goals, and philosophies of individuals and groups involved in
contemporary social movements.

4315 Directed Research in Speech Communication. (3-0) Individual or
group research projects at the advanced level that are not offered in the present
curriculum. Possibility of on-the-job training through the communication intern-
ship program. Permission and project approval must be obtained from the de-
partmental chairman prior to registration.

4331 Persuasion. (3-0) An investigation of behavioral theories of persua-
sion, the devising of persuasive campaigns, as well as the consumption and gen-
eration of persuasive messages in a variety of communication settings. Applica-
ble for careers in business, law, and human relations.

4345 Political Communication. (3-0) A study of historical and contemporary
political persuasion in the United States.

4347 Leadership and Group Communication. (3-0) An advanced course in
group communication designed to examine in detail the phenomenon of leader-
ship in groups. Various approaches to group leadership will be surveyed, and
methods of leadership training will be investigated.

Prerequisite: Speech Communication 2330 or consent of the instructor.

*May be repeated once with different emphasis for additional credit.
Courses in Theatre Arts

1154 Movement. (0-2) Four semesters of work may be completed with the following letters indicating the specific semester of work: (A) Creative movement for the theatre; designed to stimulate body flexibility and kinetic responses to environmental stimuli. Registration by theatre arts majors in conjunction with Beginning Acting; may be taken independently by non-majors, (B) a continuation of 1154A. Registration by theatre arts majors in conjunction with Intermediate Acting; may be taken independently by non-majors, (C) a continuation of 1154B including group work in dance drama and kinetic movement, (D) a continuation of 1154B including group work in dance drama and kinetic movement, (D) a continuation of 1154C culminating in the creation and presentation of an original movement production.

1254 Beginning Acting. (2-1) Classroom exercises designed to explore and discover the actor's own inner resources, and to develop the personal awareness of the student's imaginative potential. Registration by theatre arts majors in conjunction with 1154A; may be taken by non-majors independently.

1255 Intermediate Acting. (2-1) Classroom exercises designed to continue the exploration of the actor's inner resources; additional work on discovering techniques of developing a character. Registration by theatre arts majors in conjunction with 1154B; may be taken by non-majors independently.

Prerequisite: Acting I or its equivalent.

1358 Stagecraft. (3-2) The study and practice of basic techniques of scene construction, painting, and rigging. Includes laboratory work in conjunction with University Theatre productions.

2300 The Arts in Society. (3-0) A systematic review of the creative process and the arts and their effect on life. Theatre Arts majors will take Art or Music 2300.

2338 Stage Lighting. (3-2) A continuation of Theatre Arts 1358. Design and techniques in the use of lighting in the theatre. Practical experience in University productions required for one semester.

2354 Characterization. (3-2) A studio acting course in which the student explores and develops techniques of creating a role.

Prerequisite: Theatre Arts 1255 or its equivalent.

2355 Scene Study. (3-2) An advanced ensemble studio acting course in which the student explores principles of acting through the preparation and presentation of scenes.

Prerequisite: Characterization or permission of the Director of Theatre.

2358 Technical Theatre. (3-2) Advanced stagecraft studies and practice, including theatre drafting, lighting, electricity, sound, and stage effects. Laboratory work in conjunction with University Theatre productions.

Prerequisite: Theatre Arts 1358 or its equivalent.

3213 Introduction to the Fine Arts. (2-1) A study of the interrelation of theatre arts with music and art. Theatre Arts majors will take Art 3213 or Music 3213.

3320 History of the Theatre I. (3-0) A study of the theatre and its place in the social and cultural evolution from primitive civilization to 1700. Selected examples of theatre literature are studied.

3321 History of the Theatre II. (3-0) A study of the theatre and its place in the social and cultural evolution from 1700 to the present. Selected examples of theatre literature are studied.

3341 Film History and Aesthetics. (2-2) The study of the historical development of motion pictures to the present time with special emphasis on the artistic
qualities involved in film criticism. Major film directors and significant motion pictures will be studied and evaluated.

3344  Costuming. (3-2) A practical approach to effective costuming. Emphasis is on satisfying the stylistic requirements of the play, with available means, budget, facilities, time, and personnel. Practical experience with University productions required for one semester.

*3355  Playwriting. (3-2) A study of play fundamentals (structure, dialogue, and mechanics), and guidance and discussion of representative plays.

3362  Survey of Theatre History. (3-0) Not for theatre arts majors. A survey of world theatre history and dramatic literature from ancient Greece to the present.

3365  Acting Styles. (3-2) Studio course emphasizing historical as well as contemporary theories of acting; includes the presentation of individual acting projects.

Prerequisite: Theatre Arts 2355 or permission of the Director of Theatre.

3367  Drama Theory and Analysis. (3-0) A study of dramatic theory and play analysis for production, including the study of forms, styles, and methods.

3390  BFA Preprofessional Apprenticeship I. (2-4) Intensive laboratory work in group theatre methods of playwriting, directing, acting, and designing.

*4357  Scene Design. (3-2) A study of scene design as the total visual effect of the play, with practical assignments of execution through renderings and scaled models.

*4360-5360  Problems in Theatre. (3-0) Designed to give supervised experience to qualified advanced students in theatre history, playwriting, directing, acting, technical, or other theatre problems. Research problems or actual production problems may be chosen.

*4362  Repertory Theatre. (3-10) Study and practice of repertory theatre principles and procedures. Enrollment in conjunction with Southwest Texas State University's Summer Repertory Theatre.

4364  Directing I. (3-2) A study of the fundamentals of directing with practical experience provided by directing in the laboratory theatre. Practical experience in University theatre is required for one semester.

4365  Directing II. (3-2) A study of directing and directors, designed to provide actual practice in production methods. Members of the class will direct a play.

4690  BFA Preprofessional Apprenticeship II. (4-8) A continuation of the BFA Preprofessional Apprenticeship I, also including intensive laboratory work in group theatre methods of playwriting, directing, acting, and designing.

4691  BFA Preprofessional Apprenticeship III. (4-8) A continuation of the BFA Preprofessional Apprenticeship II, also including intensive laboratory work in group theatre methods of playwriting, directing, acting, and designing.

Courses in Speech Communication and Theatre Arts

(The student will designate his choice of speech communication or theatre arts at the time of enrollment for these courses.)

1340  Voice and Diction. (3-2) The human voice and the sounds of speech. The student's own voice and pronunciation will be the primary concern, using practice sessions to develop more acceptable patterns of voice and sounds.

*May be repeated once with different emphasis for additional credit.
1370 Introduction to Creative Dramatics for the Elementary Teacher. (3-0) Emphasis on using creative dramatics for total development of the child. Storytelling, pantomime, improvisation and a brief survey of dramatic literature for children are included.

2111 Speech and Drama Activities. (1-1) A course designed to provide credit for participation in speech communication and theatre arts activities. May be repeated to a total for four credits in speech communication and four credits in theatre arts.

3315 Interpretive Reading. (3-0) A study of the techniques of the oral interpretation of poetry with an emphasis on performance.
Prerequisite: Speech Communication 1340 or consent of instructor.

3370 Advanced Creative Dramatics for the Elementary Teacher. (3-0) Continuation of Speech Communication/Theatre Arts 1370 emphasizing creative teaching techniques including storytelling, pantomime, and improvisation in specific elementary curriculum areas. Opportunities for actual work with children are given.

4310-5310 Teaching of Speech and Drama. (3-0) Designed to meet the needs of teachers in the public schools. Emphasis is placed on a well-developed speech communication and theatre arts program for the grades and high school, and consideration of methods and materials for diagnosing and improving of speech communication and theatre arts. Enrollees in 5310 will be more specially concerned with teaching speech communication or theatre arts at the college level.

*4320-5320 Directing Speech and Drama Activities. (3-0) Designed to assist any teacher, whether of speech communication and theatre arts or some other subject, in directing the speech and drama activities. During the course those in the class will actually direct debate, plays, declamation, and other activities.

4330 Advanced Oral Interpretation. (3-0) A study of techniques for the interpretation of prose and dramatic literature with emphasis on performance.
Prerequisite: Speech Communication 3315 or consent of instructor.

*4352 Workshop in Speech or Drama. (3-0) A workshop designed to combine theory with practical experience in speech or theatre. After preliminary study of the subject, students participate in a supervised group project organized to prepare them for future activities in speech or theatre.

4370 Children's Theater. (3-0) Continuation of Creative Dramatics, and the theory and practice related to all phases of producing plays for and with young people through junior high school age. Practical experience in University production as required for one semester.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.

*May be repeated once with different emphasis for additional credit.
Department of Education

William M. Bechtol, Professor and Chairman
Harlan L. Ford, Visiting Professor

Professors: W. F. Brown, Conoley, Dacus, Dorsey, Garland, Juel, McCanne,

Associate Professors: Blythe, Bynum, Hefner, W. G. Henry, Jr., B. E. Hughes,
C. B. Jorgenson, D. J. Miller, *B. J. Moore, J. M. Moore, Newberry, Nicosia,
Sparks, **J. L. Thomas, Willoughby

Assistant Professors: Beck, D. H. Brown, Cogdill, Cole, Feuge, Fite, Gaddis,
Gillis, ***Goldsmith, Hatcher, Holman, Hudelson, Kurtz, **Lindsey, Lorenz,
McCaskill, Mitchell, Parkay, C. G. Rodriguez, E. H. Seifert, Ill, Tieken,
M. Travelle, L. M. Williams

Instructors: Blanks, J. H. Brown, A. V. Farr, Garrison, E. S. Harrison, Jennings,
Jensen, Longnion, McGee, M. W. Olson, L. Rodriguez, Tucker

****Supervisors of Student Teaching: Loris L. Bresie, Alta R. Brooks, Franklin A.
Calsbeek, Beverly A. Chiodo, Karen A. Chisum, Charles E. Clayton, William
H. Dibrell, Lois M. Haney, Laura W. Hastedt, Frances L. Henry, **Arnis J.
Hiebert, Keith F. Hoffmann, Betty J. Kissler, Clifton D. Knotts, Sylvia L. Lewis,
Rita A. Linard, Ingeborg R. McCoy, Edmund A. Marek, Martha H. Reynolds,
Frances Riddell, Susan Shaw, Betty J. Starling, Joe W. Walker, David C. Yates.

Requirements for the Teacher Education Program

Students are not admitted to the teacher education program until the begin­
ing of their junior year, when they apply for their first professional course. For
this admission, the student must show evidence of potential professional compe­
tence in the following characteristics:

1. Scholarship - presenting a minimum of a "C" average in Academic Foun­
dations, in over-all average, and a "C+" (2.25 grade-point average) in
secondary teaching fields or, for elementary majors, the first specializa­
tion.

2. Character

3. Personality

4. Intelligence

5. Physical and mental health

For admission to student teaching and for the recommendations to the Texas
Education Agency for the appropriate teacher certificate, the student must show
increased evidence of potential professional competence in the following char­
acteristics:

1. Scholarship - presenting a minimum of 2.25 grade-point average in

****Academic Foundations (including grades of "C" or better in English
1310, 1320), in secondary teaching fields, and in required professional
education courses (with no grades below "C").

All students applying for a provisional certificate may choose to take the
National Teachers Examination. The National Teachers Examination is no longer

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**Faculty Development Leave, Spring, 1980.
***Texas Education Agency Consultants, Vocational-Industrial Education.
****Supervisors of Student Teaching vary to a small degree during, or between, Fall and Spring Semester.
*****Vocational Education majors in agriculture, or home economics, are required to make a 2.0 grade-point average
in Academic Foundations.
******Faculty Development Leave, Fall (1/2) 1980, Spring (1/2) 1981.
mandatory for certification. Several public school districts currently require scores to be submitted from the National Teachers Examination before employment or within the first year of employment.

Curricula

A student who wishes to be certified to teach in the elementary school will follow the curriculum outlined below, and will apply to the Department of Education for a degree outline when 45 semester hours of work have been completed. One who wishes to be certified to teach in the secondary schools will follow the curriculum outlined under the department representing his first teaching field (major), and will apply to that department for his degree outline when 45 semester hours of work have been completed.

Required Professional Sequence

Eighteen semester hours of professional courses are required, including six semester hours of student teaching.

For elementary teachers, the proper sequence is: Education 3311, 3320, 4321, and 4323, 4324, 4680 together.

For secondary teachers, the proper sequence is: Education 3312, 3330, and 4331, 4332, 4681 together.

For all-level certification, with the exception of physical education, the proper sequence is: Education 3312, 3320, 3330, either 4331 or 4332, and 4380, 4381.

For all-level physical education certification, the proper sequence is: Education 3311, 3312, 3330, either 4331 or 4332, and 4380, 4381.

(All-level majors desiring to teach also in the second teaching field should take six additional semester hours in advanced secondary education.)

Directed Teaching

The courses in Directed Teaching, Education 4680 and 4681, involve a full-day assignment for one-half of a semester. It is essential that the secondary student plan well ahead with his departmental adviser so that Education 4681, 4331, and 4332 can be taken the same semester. Elementary students should plan ahead so that Education 4680, 4323, and 4324 can be taken the same semester. Failure by a student to do so may require his attendance for an additional summer term.

It is desirable that a student take only 12 semester hours during the student teaching semester. In no instance will the load exceed 15 semester hours without permission of the Chairman (Education) or Dean (Education). This permission would be given only in unusual circumstances.

Certain conferences with student teachers are required; a minimum of one each week. Some are conducted with all student teachers in one group, some with departmental groups, and some with individual supervisors.

Directed Teaching should be completed during the last long semester of school. Prerequisite for Directed Teaching includes satisfactory completion of the junior level courses in education (For elementary majors: Education 3311, 3320, and 4321; for secondary students: Education 3312 and 3330; for all-level certification except physical education: Education 3312, 3320, and 3330; for all-level physical education: Education 3311, 3312, and 3330), and clearance from the department chairman of your major teaching field.

Application for Directed Teaching in the spring semester should be made between September 1 and October 1, of the previous semester. Application for the fall semester should be made between February 1 and March 15 of the previous semester. (Fall assignments will be posted by April 20; spring assignments
will be posted by November 1.) All applications for Directed Teaching, on any level, should be made through the Office of the Director of Field Experiences.

Southwest Texas Teacher Center

The Southwest Texas Teacher Center serves in an advisory capacity and plays a major role in the implementation of the Teacher Education Program at Southwest Texas State University. Included in its organization are representatives of (1) public schools, (2) the teaching profession, (3) the Regional Service Centers, (4) the community, and (5) Southwest Texas State University.

Curriculum for Elementary Teachers Leading to the Degree Bachelor of Science in Education

($28 semester hours; includes certificate)

The student has the option of either of two plans, which differ only in the depth of the specialization areas. Each requires a total of 36 hours, but Plan I requires 18 semester hours in an academic subject, while Plan II requires 24 semester hours.

Twelve semester hours total are required with two of the following fields to be represented: science, mathematics, or modern language. The required courses in General Science 3310, 3320, and in Mathematics 1311 will count toward this requirement; elective must be chosen to complete the 12 hours.

If there is a probability of teaching in a departmentalized junior high school, or if a student is looking forward to doing graduate work in his academic specialization or plans to teach in a state requiring more depth in a specialization, he would do well to choose the 24 semester hour Plan II.

Speech Communication 1310 and Mathematics 1311 (or 1315) should usually be taken as a pair in alternate semesters, in either order; Art 1354 and Music 1311 similarly. Any of these courses may be postponed until the sophomore year.

The student should plan ahead, in consultation with his adviser, so that Education 4323, 4324, and 4680 (and no more than one other course) can be taken in the same semester.

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32-35
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<td>Education 3311, 3320</td>
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<td>During the Year Electives</td>
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<tr>
<td>Art, Theatre Arts, or Music 3213 (or 2300)</td>
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<td>31-33</td>
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**Plan I**

A. Choose one subject of at least 18 semester hours for specialization from this group:

1. Art 1314, 1321, 1354, 2321 (or 2370), 3327, 3337 (or 3365), plus three semester hours advanced art history.
2. Biology (1410, 1420) or (1310, 1410), or (1310, 1420), 3490, 4305, 4302 or 4303 or 4316. Must total at least 18 semester hours.
3. English 1310, 1320, 2330, 2340 (3311 or 3317 or 3312 or 4300), 3385, 4310.
4. French 1420, 2310, 2320, and three courses from the following: 3304, 3310, 3370, 4340, 4390.
5. Geography 1310, 2311, 3303 or 3313, 3309, 3329, 4340.
6. German 1420, 2310, 2320, and three courses from the following: 3302, 3310, 3370, 4340, 4390.
7. Physical Education 2365, 3320, 3324, 3327, *4323, three semester hours from 3323, 3329.
8. Mathematics 1311, 1315, 1317, 2363, 3315, 4304 and one advanced course.
9. Health Education 2338, 2354, 3342, 3348, 3360 and three semester hours from 1310, 2340, 3301, 3350.
10. History 1310, 1320, 2310, 2320 and three advanced courses divided between Groups A and B.

B. Choose also one group in which courses do not overlap any in Part A:

1. Language Arts: English 3311 (or 3312 or 3319), 3385, 4310; Speech Communication 3315 (or 3327); Theatre Arts 1370, Special Education 4373.
2. Science and Mathematics: Mathematics 1315, 2301; Biology 1410, 1420, 4302 or 4303, 4305.
3. Social Studies: Geography 1310, 2311, 4340; Sociology 2310; History 3347 and one other advanced history course.
4. Fine Arts: Music 3340, 3369 and three semester hours ensemble or applied music; Art 1314, 1321, 3327.
5. Crafts: Art 3322 or 3327, 3337, 3365, 4327 or 4337 or 4365; Industrial Arts 1350, 3386.

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*Adapted Physical Education.*
6. Health Education and Home Economics: Health Education 1310 and six semester hours from 2338, 2340, 2354, 3342, 3360. Home Economics 1310, 3339, 4318.

Plan II

A. Choose one specialization of 24 hours:

1. Art 1314, 1321, 1354, 2321 (or 2370), 2359, 3327, 3337, 3365, plus three semester hours advanced art history.

2. Biology (1410, 1420) or (1310, 1410) or (1310, 1420), 2360, 3440 or 3351, 3490, 4305, 4302 or 4303 or 4316. Must total at least 24 semester hours.

3. English 1310, 1320, 2330, 2340, (3311 or 3312 or 3319 or 4300), 3333 or 3335, 3385, 4310.

4. French 1420, 2310, 2320, 3300, and four courses from the following: 3304, 3310, 3370, 4340, 4390.

5. Geography 1310, 2311, 3303, 3308, 3309, 3313, 3329, 4340.

6. German 1420, 2310, 2320, 3300, and four courses from the following: 3302, 3310, 3370, 4340, 4390.


8. Health Education 1310, 2338, 2354, 3342, 3348, 3360, (3301 or 3350), and three semester hours from 2340, Home Economics 3339.

9. History 1310, 1320, 2310, 2320 and four advanced courses divided between Groups A and B.

10. Life-Earth Science: Biology 1410, 1420, 2430, 4302, 4303, 4305, and one from the following: Biology 3351, 3352, 4310, 4316, 4320, 4365.

11. Mathematics 1311, 1315, 1317, 2363, 2371, 2372, 3315, 4304, and two advanced courses.

12. Music—two hours of voice or voice class, two hours of piano or piano class, two hours of choir. Music 1311, 1312, 3207, 3340, 3369, and four hours advanced.

13. Physical Education 2365, 3320, 3323, 3324, 3327, *4323, three hours from 3329, 4351, and three semester hours physical education activity courses. No duplication of the four Academic Foundations activity courses permitted.

14. Spanish 1410, 1420, 2310, 2320, and four advanced courses.

15. Speech Communication 1310, 1340, 3315; Theatre Arts 1370, 3370, plus six semester hours from the following: Speech Communication 3317, 3327; Theatre Arts 4370, plus six semester hours (three of which are advanced).

16. Bilingual, Bicultural: English 4300, 4310; Linguistics 4307, 4320; Spanish 3304, 3371, 4340; Theatre Arts 1370.

B. Choose also four courses not included in the above specialization:

Geography 1310, 4340; Anthropology 2312, 3314 (or 4310); Health Education 2354, 3360, 4354; History 4372; Sociology 2310, 3327; English 3311 (or 3312 or 3385 or 4300 or 4310); Theatre Arts 1370; Speech Communication 3317 (or Special Education 2359 or 4373); Physical Education 2365 (or 3324); Music 3340 (or 3350); Psychology 2310 (or 4315 or 4330 or 4370); Education 2385 and Special Education 3360 (or 3322)—(for guidance studies only).

Note: Bilingual majors are required to take the courses in bold-face type.

Kindergarten Endorsement: The following four courses, 12 semester hours, will constitute endorsement in kindergarten education on the elementary level: Education 4311, 4329, 4330, 4387, 5318, 5319, 5330, 5378K.

Six semester hours of early childhood may be counted as electives toward the elementary degree.

*Adaptive Physical Education.
Before kindergarten student teaching begins, six semester hours of early childhood must be completed.

**Teachers of Young Children: (Ages 3-8)** Students seeking certification as teachers of young children must take the 56 semester hours of Academic Foundations required of all elementary education majors. **This program will certify teachers for pre-school through grade three only.** This program requires a 24-hour specialization in home economics, 12 semester hours in related studies, 33 semester hours in professional education, plus three semester hours of electives. Students interested in this program will be assigned an adviser in both the Department of Education and the Department of Home Economics. The 24 semester hours of home economics are as follows: Home Economics 1110, 1310, 2310 (or 3318), 3310, 3213, 3315, 3339, and 4318. The 12 semester hours of related studies will be: Education 4321, 4350; Mathematics 4302, plus three semester hours to be selected from Education 1310, Physical Education 2365, Special Education 3360 (1331). The 33 semester hours of professional education are as follows: Education 3311, 3320, 4311, 4323, 4324, 4329, 4330, 4351, 4378K, and 4680.

**Guidance Associate Endorsement:** Elementary teachers may obtain the Guidance Associate Endorsement by completing the 30 semester hour specialization in Guidance Studies under Plan II. The requirements are: Education 2350, 2353, 2385, 3352, 3355, 3358, 3363, 4378, and 4389, plus Special Education 3360. Secondary teachers may obtain the Guidance Associate Endorsement by completing a first or second teaching field in guidance studies. A first teaching field in guidance studies requires 30 semester hours as follows: Education 2350, 2353, 3355, 3358, 3363, 4378, and 4389, plus Special Education 3360. A second teaching field in guidance studies requires 24 semester hours as follows: Education 2350, 2353, 2385, 3355, 3358, 3363, and two courses from 3352, 4378, or 4389.

**Bachelor of Arts in Guidance Studies.** Students seeking the Bachelor of Arts degree may major or minor in guidance studies. A major in guidance studies requires the completion of 30 semester hours as follows: Education 2350, 2353, 3355, 3358, 3363, 4316, 4317, 4378, 4389, and 3353 or Special Education 3322. A minor in guidance studies requires the completion of 18 semester hours as follows: Education 2350, 2353, 3355, 3358, 3363 or 4316 or 4317, and 4378 or 4389. Either program also requires completion of the required 56 semester hours of Academic Foundations plus an appropriate major or minor in another field. Students interested in majoring or minoring in guidance studies will be assigned an adviser in both fields immediately following completion of Education 2350 and 2353.

### Courses in Education

**1310 Fundamentals of Reading Instruction.** (3-0) The basic nature of the reading process and its implications for instruction. A general beginning course introducing basic principles involved in both learning to read and in teaching reading.

**1320 Introduction to Contemporary Education.** (3-0) A study of professional choices in education based upon an appraisal of qualifications, responsibilities, and opportunities in the field. Includes comparative approaches to education, stresses responsibility of school personnel for cognitive, social, vocational, and personal development of pupils. Requires some work with children, or adolescents.

**2320 Reading and Language Skills for Reading Instruction.** (3-0) A study of the basic skills involved in learning to read including decoding, clues, word structure, and dictionary skills. Literal, interpretive, critical, and creative comprehension skills will be studied.
2350 Introduction to Guidance and Counseling. (3-0) Introduction to the principles, services, and techniques of guidance in both schools and community agencies. Study of the theoretical approaches to counseling, the techniques appropriate to the various approaches, and the application of such techniques to interview situations.

2353 Introduction to Group Testing. (3-0) Administration, scoring, and interpretation of group-administered tests and questionnaires, utilization of data derived from standardized instruments for assessing aptitude, achievement, attitude, and adjustment; application of elementary statistical methods of the interpretation of tests and test data.

2385 Survey of Technical-Vocational Education. (3-0) A study of the development, growth current programs and trends of technical-vocational education. Typical programs to be studied include: Agriculture; Home Economics, Trade and Industry; Distributive Education; Industrial Arts; Cooperative Education; Career Education; Coordinated Vocational-Academic Education; Continuing Adult Education; Post Secondary Technical Schools; Apprenticeship Program; etc. Primarily directed to public school counselors; COUNSELOR candidates.

3121 Science Activities for the Elementary School. (0-1) Science activities designed for use in the elementary school. Includes various types of organization, use of science tools, and strategies for teaching. Open to all elementary education majors.

*3311 The Elementary Learner: His Growth and Development. (3-0) Basic concepts of child development and behavior, with particular reference to the physical, social, and intellectual aspects of development; emphasis upon the principles and laws of learning as they may be applied to the elementary school child. Special emphasis is placed on the problems peculiar to the handicapped child and those children who are culturally different. Direct study of children in the public schools.

*3312 The Adolescent Learner: His Growth and Development. (3-0) General psychological principles concerning perception, motivation, learning, and forgetting; physical, mental, emotional, social and moral characteristics peculiar to the adolescent period; attention to deviations from the normal, and in emotional and intellectual development. A minimum number of observations will be required.

*3320 The Elementary School: Principles and Curriculum. (3-0) The Foundations, principles, and objectives of the elementary school; methods, materials, and planning for the provision of appropriate learning experiences in the elementary classroom. Strategies appropriate for mainstreaming handicapped pupils will be identified. Basic principles of culturally oriented learning styles will be examined and appropriate instructional materials will be evaluated. Observation and participation in elementary classroom activities.

Prerequisite: Acceptance in teacher education, Education 3311 for elementary majors and Education 3312 for all-level majors.

3321 Science in the Elementary School. (3-0) Methods of teaching with an emphasis on the processes of science, organization of materials for an integrated science program; some practical experiences in constructing and demonstrating science activities. Laboratory, two hours a week.

3322 Methods and Materials for Elementary Reading Instruction. (3-0) The planning, producing, and evaluating of instructional techniques and materials for teaching reading to the elementary school pupil. Major emphasis will be placed on tailoring instruction to meet individual reading needs and achieving mastery of basic skills. Techniques and methods of teaching reading through the use of children's literature will also be developed.

*Observation courses are taught in summer only for post graduates and experienced teachers.
3323 Teaching Social Studies in the Elementary School. (3-0) Content, methods, and materials of elementary social studies; the social sciences basis for content; maintaining a balanced program of knowledge, skills, and attitudes; providing teaching strategies and materials for all learning styles.

3324 Teaching Reading in the Secondary School. (3-0) This course deals with developmental and corrective reading in the upper elementary, middle school, and high school classroom. Some topics to be included are extension of fundamental reading skills, classroom assessment and correction of reading problems, study skills, reading and the content areas, and selection of reading materials.

3330 The Secondary School: Principles and Procedures. (3-0) The foundations, principles, and objectives of the secondary school with emphasis on unit construction, teaching methods, techniques of recitation, and classroom management. Consideration will also be given to designing effective teaching strategies for multicultural education and for mildly handicapped students mainstreamed into public school classrooms. Observations of secondary classroom activities and microteachings are required.

Prerequisite: Acceptance in teacher education and Education 3312.

3331 Teaching Spanish-Speaking Pupils to Read. (3-0) This is a course designed to acquaint the prospective elementary teacher with the most current information necessary for providing initial instruction in reading for those Spanish-speaking children with limited proficiency in English. Current information from linguistics, psycholinguistics, sociology and bilingual education will be examined.

3352 Elementary School Guidance. (3-0) Orientation to programs in elementary school guidance and counseling with special emphasis upon the role of the guidance worker in the elementary school. Stress is placed on the areas of program rationale, organization, and conceptual models; on identifying and dealing with emotional learning problems of children; and on methods and principles of consultation with teachers and parents.

3355 Career Information: Occupational and Vocational. (3-0) Study of methods and materials utilized in the planning, organization, and implementation of educational-vocational guidance activities in the school setting. Types of vocational information-gathering instruments and techniques and sources of educational-occupational literature and information will be examined and their usefulness will be studied.

3358 The Principles and Techniques of Group Guidance. (3-0) Study and practice of the principles and techniques of group guidance activities. Group organization and procedures, including such topics as leadership, group maintenance roles, group task roles, decision-making procedures, and effective methods of communication and cooperation will be observed and practiced.

3363 Developmental Approaches to Personal-Social Areas of Guidance. (3-0) Students will become familiar with sources and content of personal-social information for use in guidance activities for children, adolescents, and adults. Techniques of disseminating these kinds of information will be explored, and effective methods of communication in personal-social guidance will be practiced.

4303 Audio-Visual Education. (3-0) Lecture-demonstration-laboratory course to develop competency in the production, selection, acquisition, processing, and utilization of such visual materials as films, film-strips, slides; such auditory materials as recording, radio; such graphics as pictures, posters, graphs, globes, maps, and museum objects.
4311 Early Childhood. (3-0) Genetic, physical, psychological, and environmental factors in early childhood development; emphasis on subcultural differences and current research in the area of the pre-school child.

4313 Human Growth and Development I. (3-0) Training for teachers (elementary or secondary), counselors, supervisors, and administrators to improve their professional effectiveness through the direct study of individual pupils according to an organizing framework of scientific knowledge of human growth and development; emphasis on the physical processes, the affectional processes, and peer relationship.

4314 Human Growth and Development II. (3-0) For teachers (elementary or secondary), counselors, supervisors, and administrators to increase their understanding of the motivation, the developmental level, and the abilities of individual pupils by a direct study of individuals in the classroom; emphasis upon increasing scientific knowledge of culture, self-development, and self-adjustive areas of development.

4316 Personality and Mental Hygiene. (3-0) Study of the various theories of personality from Sigmund Freud to the present day. Methods of assessing personality, principles of mental hygiene are studied, including the basic human needs, effects of environment on the frustration of needs and the role of the school as it affects the mental health of the student.

4317 Guidance to Meet the Needs of Multicultural Students. (3-0) Study of the special problems of multicultural populations in the public schools. Students will analyze the needs of minority groups and set objectives to be reached through guidance programs, consultation with teachers and counseling. Experience in the development of special programs and planning of activities will be emphasized.

4320 Flight Instruction Academics. (3-0) Provides instruction to pass the Federal Aviation Agency written examination in order to fulfill academic requirement for a private pilot's license. Includes instruction in: Aircraft Pre-flight; Flight and System Controls; Federal Aviation Agency Regulations; Navigation; Weather; Weight and Balance; Radio Communications; and Airman Information Manual.

4321 The Improvement of Reading Instruction. (3-0) This course deals with reading instruction in the elementary schools, grade 1-6. Topics covered include readiness, assessment and diagnosis. Traditional and innovative methods of reading instruction will be examined. Developmental reading, as practiced in the public schools, will be stressed.

4323 Elementary Teaching: The Curriculum in Language Arts. (3-0) A continuation of Education 3320 in studying the elementary curriculum. Methods and materials in oral and written communication, spelling, and handwriting.

4324 Elementary Teaching: The Teacher's Role. (3-0) Additional role and duties of the teacher. This includes those involved in being a member of a profession and of the total school staff; in working in the community and with parents. Other topics discussed are evaluation of pupil progress, mainstream education, multicultural education, administration and interpretation of educational measurement, and utilization of instructional aids and community resources.

4329 Curriculum and the Young Child, I (Kindergarten). (3-0) Organization and implementation of programs for young children. Translating developmental knowledge into effective practices which may be employed in the total education of children of kindergarten age.

Prerequisite: Junior standing or above.
4330  Curriculum and the Young Child, II (Kindergarten). (3-0) A continuation of Education 4329, dealing with additional aspects of the curriculum not covered therein.

4331  Secondary Teaching: Evaluation and Guidance. (3-0) Survey of the field of evaluation and guidance of the individual pupil (including the multicultural pupil) and of certain legal aspects of the teacher's role in the public school; construction and administration of informal tests, interpretation and utilization of standardized tests. Special considerations in mainstreaming the mildly handicapped student.

4332  Secondary Teaching: Curriculum and Materials. (3-0) Principles of curriculum development; learning materials essential to carry out the curriculum, with emphasis on obtaining, constructing and using audio-visual materials; curriculum needs of mildly handicapped and multi-cultural students; some laboratory experiences with curriculum and materials are required.

4333  The Secondary Curriculum. (3-0) Brief history of curriculum development with special emphasis upon the Texas curriculum program; the basic principles of curriculum making; and the technique of curriculum as they function in perpetuating and improving democratic ideals; attention to some of the most significant researches in curriculum development.

4334  Corrective Reading. (3-2) This course explains the rationale and procedures for classroom correction of reading problems, dealing with the following topics: corrective treatment in the classroom; test selection and design; procedures and materials for correcting problems in oral and silent reading, sight vocabulary, phonic and structural analyses, and comprehension skills.

4335  Clinical Practicum. (3-5) This is the final course in the concentration. Course content has to do with diagnosis and remediation of reading disabilities; the main emphasis is on student development of prescribed competencies through observation and participation in the Reading Center for a minimum of five hours per week.

*4340  Cooperative Occupational Education. (1-20) Supervised on-the-job experience in a technical occupational area. It satisfies the occupational competency requirement for Vocational Industrial Education.

4350  Curriculum for the Pre-School Child. (3-0) Study of the educational pre-school program, its methods, curriculum, and materials appropriate for three, four, and five year old children.

4351  Seminar for Teachers of Young Children. (3-0) Directed field experiences in observation, participation, problem solving, and teaching in programs for young children. A minimum of one conference hour per week is required. Prerequisite: Junior standing or above, and completion of Education 3311, 3320, 4311, and 4350 in compliance with departmental policy.

4378  Problems in Education. (3-0) Individual problems related to areas of selected study for the undergraduate student, designed to meet individual differences for the purpose of certification. A letter following the course title on the permanent record will indicate the area of emphasis according to this code: (c) Counseling, (i) Elementary, (j) Secondary, (k) Early Childhood, (e) Bilingual. For undergraduates only.

4382  Directed Teaching (Kindergarten). (3-0) See Education 4383 for description of the course. Prerequisite: Consent of Director of Field Experiences.

4383  Directed Teaching (Elementary). (7-1/2-0) Course to satisfy the requirements of student teaching for employed teachers who find it impossible to take Education 4680. It is offered on either of two plans:

*May be repeated for credit.
(a) When offered in the summer session for experienced teachers, which is the usual arrangement, it consists of research in materials, methods, and child development, and the application of the findings to the teaching assignment of each participant. Actual preparation of curriculum materials is required along with some observation.

(b) Under some circumstances, it is offered for employed teachers as an individual in-service project related to each teacher's position, and extends through a regular school year. Since, in such cases, it involves visitation by a college supervisor, this necessitates the payment of a special fee of $75.00 to cover the added cost of supervision.

Prerequisite: Consent of Director of Field Experience.

**4384 Directed Teaching (Secondary).** (7-1/2-0) See Education 4383 for description of the course.

Prerequisite: Consent of Director of Field Experiences.

**4385 Directed Teaching in Special Education (Elementary).** (1-6) Differentiated according to area of specialization. Observation, participation, and teaching for children who are hard of hearing, mentally retarded, defective in speech, or orthopedically handicapped.

A letter following the course number on the permanent record will indicate the area, according to this code: (e) Mental Retardation, (f) Physically Handicapped, (g) Speech and Hearing Therapy, (m) Language/Learning Disabilities.

One hundred hours of clinical practice in speech therapy in a public school setting must be completed in Education 4385 and 4386 combined. (Texas Education Agency requirement)

**4386 Directed Teaching in Special Education (Secondary).** (1-6) A course paralleling Education 4385 for those doing their directed teaching at the secondary level.

A letter following the course number on the permanent record will indicate the area, according to this code: (e) Mental Retardation, (f) Physically Handicapped, (g) Speech and Hearing Therapy, (m) Language/Learning Disabilities.

**4387 Directed Teaching (Kindergarten).** (1-3) Experiences providing opportunities for observation, participation and directed teaching for students in kindergarten curriculum on the senior level. A minimum of one conference hour per week is required. (F, S)

**4389 Guidance Fieldwork.** (0-15) Internship Practicum designed to provide the opportunity to demonstrate and enhance his achieved skills in an actual working situation. It is the culminating course for the Guidance Associate.

**4680 Directed Teaching (Elementary).** (1-6) Experiences providing opportunities for observation, participation and directed teaching for students in elementary curriculum on the senior level. A minimum of one conference hour per week is required. (F, S)

May be taken for three semester hour credit (4380), all-level, Special Education. (Language-Learning Disabilities)

**4681 Directed Teaching (Secondary).** (1-6) Experiences providing opportunities for observation, participation and directed teaching for students enrolled in the curriculum for high school teachers. A minimum of one conference hour per week is required. (F, S)

May be taken for three semester hour credit (4381), all level, Special Education. (Language/Learning Disabilities)

**Vocational-Industrial Educational Courses**

**3301 Methods of Teaching Vocational Subjects.** (3-0) Introduction to fundamentals of teaching as applied to Vocational Education subjects.

*Required for pre-employment laboratory teachers and part-time training coordinators.*
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•3302 Development, Organization, and Use of Instructional Material. (3-0)
Study made of published material available in student’s occupational field sub-
jects found suitable for vocational classes will be indexed and organized for class
use. Instruction sheets necessary for efficient teaching will be written.

•3303 Aims and Objectives of Vocational Education. (3-0) Basic principles
involved in development and operation of vocational education programs under
state and federal laws.

•3304 Human Relations for Vocational Education Teachers. (3-0)
Combination of psychological and sociological factors which influence relation-
ships of vocational teachers in their pursuit of professional duties.

**3305 Shop and Classroom Organization and Management. (3-0)
Organization of procedures to facilitate teaching; setting up roll-checking de-
vices, issuing procedures for tools and materials, keeping material inventory,
using assignment and progress charts, using student leadership in nonteaching
class and laboratory routine and keeping records.

**3306 Analysis and Course Making. (3-0) Analysis made of occupations to
obtain content for instructional information, jobs and operations studied to de-
termine order and content of operation, job evaluation, and job safety. Each
student will make a course of study for some particular occupational subject.

***3307 Selection, Placement, and Follow-up in Vocational Education. (3-0)
Selecting occupations suitable for young people to learn, placing students in
suitable employment on part-time basis, coordinating their school duties with
their work activities.

***3308 Problems in Cooperative Training. (3-0) Organization and
presentation of content material necessary in part-time cooperative programs,
and direction of study of students engaged in such programs.

For course descriptions, and further information about available graduate
offerings, please consult the Graduate School Bulletin.

*Required for pre-employment laboratory teachers and part-time training coordinators.

**Required for pre-employment laboratory teachers.

***Required for all part-time cooperative coordinators.
Department of Health and Physical Education

Theodore F. Keck, Professor and Chairman
Professors: Avent, Calsbeek, Hays, Patton, J. A. Smith
Associate Professors: Hoffmann, M. A. Johnson, C. R. Scott, Wacker, B. L. Wright
Assistant Professors: McDonald, B. M. Miller, Reeh, D. H. Schmidt
Lecturers: Conner, Lord, St. John

All students are required to complete any four units of physical education activity courses, and/or marching band, in any sequence totaling a minimum of four semester credit hours. These should normally be completed during their first four semesters of residence. A student may enroll in a course in physical education activities during each semester in residence and thus may offer toward graduation a maximum of eight semester hours of credit earned in such courses. The following students may, however, at their discretion, substitute credit earned in other courses for that which they would be expected normally to attain in physical education activities: (a) students 23 years of age or over at the time of their initial matriculation in this University, (b) married women with children, and (c) veterans who have served at least one year in the Armed Services. Exemptions do not apply to students who are taking a major or minor in health and physical education.

If a disability is revealed by the health examination, the physical education of the student in question will be adjusted accordingly. If a student has knowledge of a disability that should restrict participation, he should see the University physician prior to enrollment and the program will be adjusted upon receipt of the recommendation of the University physician.

CURRICULA — Men and women may obtain a Bachelor of Science in Education degree with majors in Health Education or in Physical Education. A Bachelor of Science in Health Education and a Bachelor of Science in Recreational Administration, both non-teaching certification programs, are also offered.

Bachelor of Science in Education Degree
(128 semester hours; includes certificate)

Major in Physical Education

Notes:
1. Second teaching field required.
2. Physical Education 3322 and the major/minor activity courses must be taken prior to student teaching for secondary certification.
3. Physical Education 2365 and 3324/3327 must be taken prior to student teaching for all-level certification.
4. The education sequence for all-level certification will be 3311, 3312, 3330, 4331 or 4332, 4380, 4381. (If desiring to teach also in the second teaching field, a student should take six additional semester hours in secondary education.)
Freshman Year

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<td>Chemistry 1310 (or 1410), 1430</td>
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<td>English 1310, 1320</td>
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<td>History 1310, 1320</td>
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<tr>
<td>Mathematics 1310 (or 1315) or Modern Language</td>
<td>3-8</td>
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<tr>
<td>Speech Communication 1310</td>
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<td>Physical Education 1170, 1175, 1176, 1177, 1178, 1181 (or 1182), 1190 (or 1191 or 1192)</td>
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Sophomore Year

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<td>Political Science 2310, 2320</td>
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<td>Health Education 2338 (or 3348)</td>
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Junior Year

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<td>Philosophy 3201 (or 1305)</td>
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<td>Second teaching field</td>
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<td>Physical Education 3320, 3322, 3323</td>
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<td>Physical Education, six hours from 3317, 3329, 4319, 4323</td>
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Senior Year

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<td>Physical Education 4351 and 6 hours elective theory</td>
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<td>Electives</td>
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<td>27-33</td>
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Athletic Training Specialization

To obtain a specialization in athletic training, a student must complete the following courses: Physical Education 2356, 3317, 3320, 3356, 4323, and six semester hours from 1196, 2196, 3196, or 4196 (each of which may be repeated); Health Education 2354, 2338 (or 3348); Home Economics 3339; and Biology 2340, 2350. There must be a secondary level teaching certificate completed with at least a second teaching field in physical education or health education. Three years of clinical experience at the University level are required. The program is open to both men and women. Upon completion of the above requirements, the applicant will be qualified for the State of Texas Athletic Trainers License, and the National Athletic Trainers Association Certification pending approval by the two boards after successfully passing the tests administered by the two respective boards.

Dance Certification

To obtain teaching certification with dance as a first teaching field, a student must complete the following courses: Physical Education *1181a, *1182a, *1111b, *1111c, *1111d, 1110a or 1180a, plus four elective hours of dance activities, 2108, 2109, 2356, 2365, 3320, 3330, 3332, 3365, 4365, 4366, 4367. For dance as a second teaching field, see second teaching fields.

*These courses count as the activity requirement in academic foundations.
Activity Courses

All activity courses meet two clock hours per week for one semester hour credit unless otherwise designated.

Physical Education Major/Minor Courses

Courses numbered 1170 through 1199 are physical education major-minor courses. Non-major/minors may enroll only with authorization of the department.

1. Badminton, basketball, field sports, golf, handball, jogging, tennis, track and field, volleyball, weight training, etc.: 1170-1179.
2. Gymnastics, apparatus, balancing, floor exercises, trampoline, tumbling, etc.: 1190-1192.
3. Rhythmic activities, ballet, modern dance, and recreational dance, etc.: 1180-1182.

Activity Courses Open to all Students

Courses numbered 1100 through 1169, 1200 through 1205, 1225, 2108, and 2109 are available to all students:

1. Individual and dual sports including angling, archery, aquatics, bowling, cycling, golf, handball, tennis, volleyball, wrestling, etc.: 1100-1107, 1120, 1122-1123, 1130-1150, 1220.
2. Rhythmic activities including ballet, modern dance, and recreational dance: 1108-1112, 2108, 2109.
3. Scuba diving, basic to professional instructor certification, under-water photography: 1200-1205.
4. Swimming from beginning to Life Saving and Water Safety Instruction: 1124-1126, 1225.
5. Gymnastics (men & women), balancing, floor exercise, trampoline, tumbling: 1152-1159.
6. Varsity sports for men and women including basketball, football, golf, gymnastics, swimming, tennis, track and field, etc.: 1121.

Courses in Physical Education

*1196, 2196, 3196, 4196 Field Problems in Athletic Training. (1-12) A study of the training room and its practices and procedures. A weekly one hour seminar and a minimum of 12 hours per week of clinical experience. Prerequisite: Consent of the instructor.

1225 Methods of Water Safety Instruction and Administration of Aquatic Programs and Facilities. (1-3) Certification as an American Red Cross Water Safety Instructor. May be substituted for one of the four activity courses required for graduation. Prerequisite: Course 1127 or Senior Life Saving and Swimmers Skill cards and permission of the instructor.

1310 Foundations of Physical Education. (3-0) Introduction to the various areas of physical education, including brief historical backgrounds, professional opportunities, present status, past and present leaders, individual awareness of professional responsibilities; familiarization with current trends and issues, and professional literature.

1341 Officiating Physical Education Activities. (3-3) Basic skills and officiating of most important activities of school athletic program; (volleyball, handball, softball, touch football, soccer, and tumbling).

*Each course may be repeated once.
Outdoor Education I. (2-2) Prepares leaders for school camping programs and the nature of experience-centered learning. This includes classroom activities in day camping and residential school camping programs; organization and administration. Emphasis upon use of classroom activities in the out of doors.

Dance Composition I. (0-3) Basic principles of dance composition, solo choreography, in applied situations. Emphasis on skilled use of space, dynamics, and rhythm in building total artistic compositions. Practical experience, productions, and class will help students use basic music and dance forms as a basis for more complex choreography.

Prerequisite: Beginning and intermediate modern dance or consent of instructor.

Dance Composition II. (0-3) Utilizes improvisation as a creative dance technique in designing new movements for choreography. Stimulation, selection, use of improvisational dance materials with artistic discrimination. Current trends and techniques. Emphasis on designing original movement, maintaining aesthetic and artistic forms.

Intramurals. Principles, content, organization, and administration of school intramural program.

Prevention and Care of Athletic Injuries. (3-3) Study of massage, taping, bandaging, care of sprains, bruises, strains, wounds, and problems of the athletic training room.

Rhythm and Movement Activities for Children Five to Twelve Years of Age. (3-2) Techniques of stimulating movement exploration as a basis of developing basic movement skills, fitness, and physical education activities for the elementary school situation. Use of creative problem solving for movement discovery.

Prerequisite: Beginning modern dance or recreational dance recommended.

The Physiology of Exercise. (3-0) Application of physiological principles to health and physical education with an analysis of the manner in which the body reacts to the exacting requirements of exercise.

Prerequisite: Biology 2340, 2350 or equivalent.

Kinesiology. (3-0) Study of human movement from the point of view of the physical sciences. Experiences are provided in the analysis of motor performance through practical application of mechanical and anatomical laws.

Theory, Techniques, and Application of Sports. (3-3) Techniques and theories underlying sports activities, and their application to practical situations; special emphasis upon aids, equipment, organization, control and management, and classification of participants; instruction and practice in officiating.

Prerequisite: Permission of the department.

Principles of Health and Physical Education. (3-0) Social, political, economic, historical, psychological and biological backgrounds are studied as sources for forming basic principles in relation to physical well-being. Specific units of work include study of nature of man, psychology of acquiring motor skills and cultural changes and influences.

Physical Education for the Primary Grades. (3-2) Principles and content of program planning for the primary grades. A laboratory period provides opportunity in applying these principles.

Physical Education for Children in the Upper Elementary Grades. (3-2) Principles, content and organization of the program for children in grades four through eight. A laboratory period provides opportunity to apply these principles in controlled teaching situations.
3329 **Introduction to Motor Learning.** (2-2) Physiological and psychological development of the child in relation to learning neuromuscular activities. Inquiry will be made into the various motor learning theories including those relating to children with learning handicaps.

3330 **Materials for Rhythmical Activities.** (3-1) Theory of dance movement and skills, and the techniques of utilizing these skills in a practice classroom situation. Exposure to wide areas of available resources and aids for the dance classroom.

Prerequisite: Beginning modern dance and recreational dance.

3332 **Demonstration Planning and Production.** (3-0) Develop skills required to write and produce dance-lecture demonstrations and dance concerts in the standard educational institutions as well as professionally. Basic will be the organization of dance material for performance, lighting, make-up, prop construction and accomplishment for performance so that a smooth, cohesive, program may be presented.

Prerequisite: Junior standing.

3340 **Coaching of Women's Sports.** (3-3) Techniques and theories underlying the coaching of girls' and women's sports. Special emphasis upon aids, equipment, organization, and administration of the program.

3356 **Management of Athletic Training Programs.** (3-3) Provides a review of measures for the prevention, management, and rehabilitation of athletic injuries. Problems such as nutrition, physical examination, and athletic training facilities and equipment.

3365 **Rhythmic Structure of Movement.** (2-2) The structural analysis of basic and complex dance movements, their inherent rhythmic configuration. Understanding of movement and its rhythmic structure and correction of movement errors. Practical experience in percussion accompaniment of these movements will be emphasized.

Prerequisite: Beginning Modern Dance and Recreational Dance. Junior-senior level course.

4301 **Coaching of Individual and Dual Sports.** (3-1) Coaching individual and dual sports such as golf, swimming, tennis, wrestling, etc. Methods of coaching are studied through lectures, demonstrations, and reading of present-day literature.

4302 **Track and Field Coaching.** (3-1) Methods of coaching are studied through lectures, demonstrations, and reading of present-day literature.

4303 **The Administration of Athletics.** (3-0) Factors involved in the administration of an efficient educational athletic program. Avoidance of pitfalls, embarrassing situations, and misunderstandings, in order that an integrated program will result.

4319 **Organization and Administration of Physical Education.** (3-0) Selection of activities for a public school program, placement, time allotment of staff, and students. Method in administering and integrating a complete physical education program.

4323 **Physical Education and Recreation for the Handicapped.** (2-3) Selecting special activities in terms of individual needs and capacities and to modifying those found in the regular program. Opportunity to engage in activities and to observe demonstrations using handicapped children.

4337 **Independent Study of Special Problems in Physical Education.** (3-0) For the undergraduate student who displays promise and aptitude in physical education research. The student learns the procedures, collects data pertinent to, and analyzes the results of the research.
Prerequisite: 3.00 or higher grade-point average and permission of the department.

4351 Tests and Measurements in Health and Physical Education. (3-0) Evaluative instruments unique to the field of physical education. Practical experiences provided in test administration, scoring, and interpretation of results.

4365 History and Philosophy of Dance. (3-0) Exposure to a wide variety of literature in the area of dance, art, and science. Theory and philosophy of dance as a part of the educational system; the physical education program, and a developing art form.

4366 Dance as an Art Form. (3-0) Establishes the relationship of dance as a performing art to all the other art forms, to develop an understanding of the aesthetic theories in the arts, and the application of those theories to styles of dance found in the theatres and educational situations today.

4367 Advanced Dance Composition: Theory and Practice. (3-0) Students will choreograph, costume, light, and design original accompaniment for a group dance of substantial length, justifying artistic choices in an accompanying documented paper. The results of this course will be a senior dance concert.

4391 Football Coaching. (3-1) Methods of coaching are studied through lectures, demonstrations, and reading of present-day literature.

4392 Basketball Coaching. (3-1) Methods of coaching will be studied through lectures, demonstrations, and reading present-day literature.

Bachelor of Science in Education
(128 semester hours; secondary school certificate)

Major in Health Education
(30 semester hour major)

Notes:
1. Courses required for a second teaching field in health education are: 1310, 3360, 4311, 4336, and nine semester hours from 2338, 2340, 2354, 3348, and three semester hours from 3301, 3342, 3350, Home Economics 3339.
2. A health education specialization may be taken by students not desiring teacher certification. (See next section—24 semester hour major).
3. Health Education 4336 must be completed prior to student teaching.

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**Sophomore Year**

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**Junior Year**

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| Art, Theatre Arts, or Music                 | 2-3   | Psychology 2310 or                     |       |
| 3213 (or 2300)                             |       | Anthropology 2312 or                   |       |
| Philosophy 3201 (or 1305)                  | 2-3   | Sociology 2310                         | 3     |
| Second teaching field                      | 6     |                                         |       |
| Home Economics 3339                        | 3     |                                         |       |
|                                            |       |                                         | 16-18 |

**Senior Year**

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**Bachelor of Science in Health Education**

*(128 semester hours — non-teaching degree)*

24 semester hour major

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*If certain teaching fields are selected, the electives in the senior year may be used to complete the 24 hour requirement.*
Junior Year | Hours | Senior Year | Hours
--- | --- | --- | ---
Health Education 3348, 3350 | 6 | Health Education 4340, 4350, 4360 | 9
Minor | 6 | Minor | 12
Home Economics 3339 | 3 | Sociology 3327 or 3337 or 4310 | 3
Sociology 2320, 4330 | 6 | Electives | 6
Journalism 3310 | 3 | | |
Electives | 4 | | |
Art, Theatre Arts, or Music | | | 30
3213 (or 2300) | 2-3 | | |
Philosophy 3201 (or 1305) | 2-3 | | |
| | 32-33 | | |

Suggested electives: Psychology 3319, 4330; Management 4373; Home Economics 4365, Social Work 2350.

Courses in Health Education

1310 Foundations of Health and Fitness for Daily Living. (3-0) An introduction to health education to acquaint students with basic principles of orthobiosis. Emphasis on the relevance of educating for health, present health trends and their implications.

2338 Use and Abuse of Tobacco, Alcohol, and Drugs. (3-0) Explores problems of decision making, emotional health, and choice of life styles in modern culture. Emphasis is upon prevention and effective teaching as a tool in this process. All mood and behavior modifiers are taken into consideration, as well as effects of drug dependency.

2340 Community Health. (3-0) Acquaints the student with all aspects of community and public health, functions of the community, voluntary and public health services at local, state, national, and international levels. Selected current health problems, pathological conditions, poverty, health care delivery problems related to school health.

2354 First Aid and Safety Education. (3-0) Lecture, laboratory course in Standard First Aid procedures, Cardiopulmonary Resuscitation, and safety education. Opportunity given for American Red Cross Certification.

3301 Conservation of Human Health. (3-0) An examination of the ecological impact resulting from contemporary socio-political action and its resulting influence on human health.

3342 The Function and Scope of the School Health Service Program. (3-0) Function and scope of school health services and healthful school living. Investigation and developing skills in screening tests, health appraisals, health counseling, accident prevention, and supervision of the health environment and health service personnel.

3348 Prevention of Disease. (3-0) Epidemiology of disease entities, identification and control of major communicable diseases of man. Special emphasis pertains to chronic disease, and the present epidemic of venereal disease in our society. The venereal disease division of the Texas Public Health Department provides consultant services.

3350 Consumer Education for the Health Sciences. (3-0) Involves students in establishing concepts toward self-protection against the continual bombardment in sales promotion about health products and services. The legislation, investigation, and education conducted by organizations and agencies. Prevention of quackery in unsolved health problems.
3360 Family Life and Sex Education. (3-0) An in-depth study for the prospective elementary and secondary teacher concerning the topic of instruction and the methods of teaching for grades kindergarten through twelfth of family life and sex education. Special emphasis on curriculum development and implementation.

3375 Health Education for the Elementary School. (3-0) Designed for the elementary education major. Designed to meet state certification requirements. The role of the elementary teacher in the total school health program with special emphasis on teaching for health with effective behavioral techniques.

4311 Organization and Administration of a School Health Program. (3-0) Organization and development of functional and comprehensive health program, including both elementary and secondary levels; emphasis upon coordination of all aspects of the program, evaluation of health needs of pupils and community, and use of community resources in school health programs.

4336 Methods and Materials for the Secondary School Health Program. (3-0) A brief survey of the role of health in the school program. Special emphasis on the areas of instruction recommended by the Texas Education Agency and methods for implementation of these areas.

4340 Principles of Community Health Education. (3-0) Application of principles and techniques of public relations to community health oriented publics, consideration of different communication media, analysis of the effectiveness of each. Group dynamics in relation to the special needs of community health educators, basic issues and assumptions, cohesiveness, leadership and group performance.

4350 Research and Statistics in Health. (3-0) Methods of test construction and program evaluation procedure. Data gathering techniques, research reporting, and application of research findings for program improvement in health education. Ability to use demographic data and vital statistics in ascertaining community health problems.

4354 Advanced and Instructor First Aid. (3-0) Lecture, discussion, demonstration, and skill practice in advanced first aid including instructor training. Opportunity given for American Red Cross Certification.

Prerequisite: Current standard First Aid Certificate or Standard Multi-media Certificate and Cardiopulmonary Resuscitation (CPR) modular certificate American Red Cross (ARC).

4360 Internship in Public Health. Participation in the on-going work of an official or voluntary health agency. The work will be supervised by a faculty member in the Department of Health and Physical Education.
Bachelor of Science in Recreational Administration

(128 semester hours)

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
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<td>Sociology</td>
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<td>Journalism 4318</td>
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<td>Music 1311 (or 3255 or 3340)</td>
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Courses in Recreational Administration

1310 History and Philosophy of Recreation. (3-0) Introduction to recreation, includes brief historical backgrounds, professional opportunities, present status, past and present leaders. Role of leisure time in our social structure, professional responsibilities, familiarization with current issues and trends, and professional literature. Lecture and field trips.

1315 Camp Leadership. (2-3) Study of literature on camping, group discussion of camp problems, and actual participation in the various activities of camps.

1320 Introduction to Therapeutic Recreation. (3-0) History philosophy, appropriate terminology and professional opportunities in the therapeutic recreation profession. Identification of client groups and the role leisure time activity plays in their lives. Lecture and field trips.

2310 Methods and Materials in Social and Indoor Sports. (3-0) Program planning, club organization, and leadership strategy of social recreation. Includes techniques and theories of teaching indoor recreational activities and sports.

2320 Outdoor Recreational Sports. (3-0) Knowledge, skills, and appreciation of the outdoor recreational sports, games, and activities needed to organize and administer a varied program of recreation.

*To be prescribed by the Department of Health and Physical Education.

**Supportive courses: Eighteen semester hours to include: Theatre Arts 3370; three hours from Art 1354, 3327, 3337, 3365; Industrial Arts 3384; and nine hours to be selected with the approval of the major adviser from the following: Agriculture, art, biology, health education, industrial arts, journalism, music, physical education, psychology, speech communication and sociology.
3320 **Principles of Therapeutic Recreation.** (3-0) Knowledge and understanding of the principles and practices in therapeutic recreation services. Acquiring ability to apply this knowledge in developing appropriate therapeutic recreation programs and services relative to motor, social and educational needs of participants.
Prerequisite: Recreation 1320.

3325 **Recreational Leadership.** (3-2) Prepares leaders for recreational enterprises in the community; the present day in recreation; emphasis on the coordination of recreational facilities, the content of programs for various groups in relation to age and interest, and the administration and evaluation of community recreation.
Prerequisite: Recreation 2310 or 2320.

3335 **Recreation Program Development.** (3-1) Basic principles and procedures for developing recreation programs responsive to human needs. Provides the opportunities to acquire and utilize recreation programming skills through practical application.
Prerequisite: Recreation 2310 or 2320.

3360 **Field Work in Recreation.** (0-20) The student will participate in the ongoing work of a selected recreational program. The work will be supervised by a faculty member trained in the recreation field.
Prerequisite: Recreation 1310.

4319 **Recreation Administration.** (3-0) Organization and administration practices such as budgeting and purchasing, office management, annual reports, supervision of personnel, working with boards and volunteer leaders.
Prerequisite: Recreation 3325 or 3335.

4380 **Seminar in Recreation.** (3-0) Complements the field work experiences and will be held concurrently with the field work. Current problems and trends in programming will be discussed.
Prerequisite: Recreation 3325 or 3335.

4381 **Directed Field Experience in Community Recreation.** (1-6) Experiences providing for observation, participation, and directed experiences in a selected area of recreation. A minimum of one conference hour per week is required.
Prerequisite: Recreation 3360.

4382 **Directed Field Experience with Volunteer Agencies.** (1-6) Experiences providing for observation, participation and directed experiences in at least one youth agency. A minimum of one conference hour per week is required.
Prerequisite: Recreation 4381.

4680 **Internship in Recreation.** (1-12) Experiences providing on the job training in a selected area of recreation. The area selected will be the major interest of preparation. A minimum of one conference hour per week is required.
Prerequisite: Recreation 4382.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
Department of Industrial Arts

William L. Deck, Professor and Acting Chairman
Professor: Ballard
Associate Professors: Walker, Windham
Assistant Professors: Hablingreither, Yarchuska
Instructor: Becker, Cooper, Vickers
Lecturers: Maddox, Psencik

Bachelor of Science in Industrial Arts Degree
(128 semester hours; includes certificate)

Notes:
1. This is Plan III of the Texas Education Agency with certification only in industrial arts, requiring 48 semester hours.
2. No minor is required.
3. Twelve semester hours total are required with two of the following fields to be represented: Science, mathematics, or modern language.

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Bachelor of Science in Industrial Arts Degree
(128 semester hours; no certificate)

General Industrial Arts Program

Notes:
1. Major requirement is 48 semester hours.
2. No minor is required.
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Requirements for a Non-teaching Minor in Industrial Arts

Twenty-four semester hours are required for a minor in industrial arts. Twelve must be advanced. Other courses will be determined by conference with the Chairman of the Department of Industrial Arts.

Courses in Industrial Arts

1320 Woods. (3-3) Furniture and small projects afford practice in all the hand tool operations used in bench woodwork; growth/structure of the tree; kinds of wood, wood properties, use/care of hand tools, and finishing procedures.

1330 Metals. (3-3) Study of the origin, composition, and production of common metals. Basic welding processes involving oxyacetylene, electric arc, and shielded arc.

1413 Engineering Design Graphics. (3-3) Provides industrial arts, pre-engineering, and other students the tools and techniques utilized in the preparation of various working drawings, lettering, geometric working drawings for wood, metal, electrical, aircraft, piping, machine tools, numerical control, and industrial applications.

1450 Photography. (3-3) Black and white photography stressing the basic fundamentals of the photographic process; use of modern cameras and accessories; procedures in making pictures from exposed sensitive materials to completed prints; competencies in darkroom procedures. See Journalism 1450.

1632 Materials and Processes of Industry. (6-6) The variety of materials, processes, and equipment used by industry to change raw materials into industrial materials or finished products including metallics, plastics, earths, and others, processes and equipment used to separate, combine, or form the materials studied.

2310 Machine Drafting. (3-3) Machines, machine parts, fastenings, tools, dies, sheetmetals, patterns, production drawings, complex machines in mul-
tiview and pictorial projection, studying standard machinery design, fabrication methods, and independent work in elementary machine design.

Prerequisite: Industrial Arts 1413.

2320 Woods. (2-4) Use, maintenance, and repair of woodworking machinery; safe practice in machine operation; industrial finishing techniques; visits to factories and construct advanced projects.

Prerequisite: Industrial Arts 1320.

2330 Metals. (3-3) Operations of the lathe, drill press, shaper, milling machine, precision tools and measurement techniques and visits to industries to observe production techniques.

2344 Power Technology I. (3-3) A course in modern power; theory, design, and principles of operation of various power units; disassembly, testing, and operation of engines of the gasoline, diesel, and steam type.

2350 Exploring Advanced Black and White Darkroom Techniques. (2-4) Experimenting with various darkroom techniques, such as high contrast printing, combination printing, multiple printing, base-relief, solarization, pasteurization, reticulation, combining black and white with color, in order to enhance their black and white printing competencies.

Prerequisite: Industrial Arts 1450 or Journalism 1450.

2365 Printing. (3-3) The printing industries, composition, proof reading, makeup, press work, processes involved in letterpress printing; offset printing methods, silk screen work, bookbinding.

2370 Electricity/Electronics Fundamentals. (3-3) Fundamentals of covering safety, OHM's Law, series, parallel, and series-parallel circuits, meters, relays, and basic transistor circuits.

3310 Industrial Design. (3-3) Principles of design, analysis, creation, and development of projects in acceptable forms of visual communications, consumer products, commercial equipment, production, research design problems, building actual models of design, using materials and methods to create better products.

3313 Architectural Drafting. (3-3) Architectural drafting and home planning; exterior and interior design of the home; essentials of heating, lighting, ventilation, sanitation, and legal aspects of homebuilding; structural systems in wood, concrete, and metal. Complete plans for a residence.

Prerequisite: Industrial Arts 1413.

3320 Woods. (2-4) Furniture and cabinet making, new materials for woodworking, elements of upholstery, and trends in modern furniture design. Factories and stores will be visited.

Prerequisite: Industrial Arts 1320.

3322 Development of Technology. (3-0) The role of technology in the pre-Europe and England industrial revolution, the Europe and England industrial revolution and the American industrial revolution.

3344 Power Technology II. (3-0) Explores all basic energy systems with emphasis on those systems of power used daily by the individual. The impact of energy on technology and conservation of energy are also integral parts of the course.

3350 Photography. (3-3) Analysis and application of photography as visual communication; use of professional equipment; 35 mm photographic system, Polaroid industrial view camera, slide copier, copy stands, tape recorder. Students plan, produce, and evaluate 2 x 2 color slides for visual communication applications.
3365 **Printing.** (3-3) Photo-offset fundamentals. Layout, type composition, process camera and darkroom processing, stripping, platemaking, and press-work. Advanced printing projects are selected on an individual basis. 
Prerequisite: Industrial Arts 2365.

3370 **Audio Frequency Communications.** (3-3) Use of the Oscilloscope, Inductance, Inductive and Capacitive Reactance, Transistor Configurations, RC, Direct and Transformer Coupling, Transistor Amplifiers, Amplifier Test and Troubleshooting Procedures and Oscillator Circuitry. 
Prerequisite: Industrial Arts 2370.

3380 **Industrial Crafts.** (3-3) Experiences in leather, plastics, enameling, wood, and art metal crafts.

3384 **Recreational Crafts.** (3-3) A service course for recreation majors to acquire skills, attitudes and knowledge related to conducting a craft program as part of a recreation program. Not applicable to Industrial Arts degree. See Industrial Arts 3380.

3386 **Industrial Arts for Teachers of Elementary Grades.** (3-3) Experience in the use of tools, materials, and projects adapted to the manual skills of the elementary child to qualify teachers to make practical, inexpensive additions to the activity center of the elementary schoolroom.

*3388 Preparing to Teach Industrial Arts.** (3-0) Contemporary philosophies and procedures in industrial arts with the emphasis on the public schools of Texas. The students will plan and develop instructional resource units. Required of all majors seeking certification.

4197 **Special Topics.** (Arrangement) The investigation of a special topic by the development of the problem, research the topic, and the presentation of the findings as they applied to industrial arts/industry/technology. This course will be applicable to all areas of industrial arts, and must be done only with the approval of the cooperating faculty member.

4297 **Special Topics.** (Arrangement) The investigation of a special topic by the development of the problem, research the topic, and the presentation of the findings as they applied to industrial arts/industry/technology. This course will be applicable to all areas of industrial arts, and must be done only with the approval of the cooperating faculty member.

4310 **Technical Drafting.** (3-3) The application of basic principles of engineering drawing to the various phases of drafting, such as structural steel, electrical, piping, aerospace, topographies, patent office, jigs, fixtures, and industrial illustrations; standard handbooks, tables, and engineering data in each area. 
Prerequisite: Industrial Arts 2310 or permission of the Instructor.

4313 **Advanced Architectural Drafting.** (3-3) Architectural drafting and light commercial construction; community, urban and regional planning; exterior and interior design of selected light commercial buildings; essentials of heating, lighting, ventilation, sanitation, and legal aspects of commercial buildings; structural systems in wood, concrete, and metal. Complete plans for a light commercial, institutional, or public building will be made. 
Prerequisite: Industrial Arts 3313.

4330 **Metals.** (3-3) Advanced experiences in metal technology with emphasis on foundry, forging and heat treating. Design and testing of metal components.

* A grade of "C" is required.
4344 **Power Technology III.** (3-3) Advanced studies in modern power systems; the jet engine, turbine engine, diesel engine, fluid power, pneumatic power, and rocket propulsion. Experiments in the laboratory utilizing live engines, analysis equipment and experimenter teaching systems.
Prerequisite: Industrial Arts 2344.

4350 **Color Printing.** (2-4) The making of color photographic prints. Students will use modern photographic equipment, such as color head enlarger, color analyzers, film processors, and automatic print processors.
Prerequisite: Any two of Industrial Arts 1450, 2350, or 3350.

4360 **World of Construction.** (3-3) Learning materials package developed by the Industrial Arts Curriculum Project. Students learn how roads, tunnels, bridges, dams, and buildings are produced and serviced by a managed-production system. They develop cost estimates working as teams and perform simulated and actual construction activities.

4362 **World of Manufacturing.** (3-3) Learning materials package developed by the Industrial Arts Curriculum Project. Students learn about manufacturing technology, management practices, production systems, personnel practices, and develop an awareness of vocations in manufacturing industries. Study is made of manufactured products and the tools and materials utilized in their manufacture.

4371 **Radio Frequency Communications.** (3-3) RF Generator, Hartley, Colpitts, and Crystal Oscillators, Superheterodyne Radio Circuity, Principles of Communications, Filters, Modulation and Demodulation, Transmitting Antennas, and AFC Principles.
Prerequisite: Industrial Arts 3370.

4372 **Electronic Instrumentation.** (3-3) Transistor configurations, field effect transistors and circuits, voltage regulation, amplifier feedback principles, operational amplifiers and circuitry and unijunction transistors and applications.
Prerequisite: Industrial Arts 2370.

4373 **Industrial Electronics.** (3-3) Silicon Controlled Rectifiers and Circuit Applications, Unijunction Transistors and Circuit Application, Diac and Triac Power Control Circuits, Photoconductive and Photovoltaic Cells, LED's and LED Application, Wave-shaping Circuits, Basic Transistor Configurations, Multivibrators, and Basic Logic Circuits.
Prerequisite: Industrial Arts 2370.

4374 **Digital Electronics.** (3-3) Solid digital electronics from basic concepts to current industrial needs in terms of logic gates (all types), number systems counters (all types), registers (all types), sequential control circuits and shift register generator.

4375 **Computer Circuit Electronics.** (3-3) Computer circuits as they are related to digital electronics, digital computer circuits, microprocessor and memory concepts.

4380 **Safety Education.** (3-0) Education for safety in the home, in the school building, on the playground, in industry, on the farm, on the highway, in recreation and in play; liability and responsibility.

*4388 **Teaching and Managing Industrial Arts.** (3-3) The contemporary classroom in terms of students, learning environments, budgets, physical facilities, supplies and equipment. The students will experience sample teaching situations using a variety of methodology and subject matter. Required of all majors seeking certification.
Prerequisite: Industrial Arts 3388.

*A grade of "C" is required.*
4397 Special Topics. (Arrangement) The investigation of a special topic by the development of the problem, research the topic and the presentation of the findings as they applied to industrial arts/industry/technology. This course will be applicable to all areas of industrial arts, and must be done only with the approval of the cooperating faculty member.

4399 Seminar in Industrial Arts. (3-0) The topic for this course will be changeable. The course will involve the identification of the topic, its nomenclature, its processes, tools, equipment or materials, and its application to industrial arts. The topic may apply to either the certification program or the general program or to both. A final report summary or presentation will conclude each seminar.

Courses in Driver and Traffic Safety Education

Certification: A student may receive State of Texas Certification in Driver’s Education by completing nine semester hours, which include the following: Industrial Arts 4380 (or Health Education 4334), 4382, 4385 (or 4393). (Note: Supervising Teacher Certificate must also complete above requirements, plus Industrial Arts 5692.)

4380 Safety Education. (3-0) Education for safety in the home, in the school building, on the playground, in industry, on the farm, on the highway, in recreation and in play; liability and responsibility.

4383 Driver and Traffic Safety Education I. (3-0) Content, methods and materials for instruction in the classroom and multi-media phases of driver and traffic safety education. Experiences in behavior modification techniques and in use of psychophysical testing devices are included. Participant must acquire competence in the classroom phase of traffic safety education.

Prerequisite: Industrial Arts 4380 (or Health Education 4334).

4385 Driver and Traffic Safety Education II. (3-3) Methods and techniques of in-car instruction, multiple car facility use, and simulation presentation. Participant is required to teach a high school student to drive.

Prerequisite: Industrial Arts 4383.

4387 Motorcycle Safety and Rider Education. (3-3) Techniques and methods of teaching beginner rider education. Includes classroom techniques as well as laboratory experience in on-street and off-street riding.

4393 Driver and Traffic Safety Education III. (3-3) To prepare participants to teach physically and mentally handicapped persons to drive. To prepare driver education teachers to become proficient in the use of multiple-car ranges, driving simulators, multiple-responder systems. Maintenance, operation, and teaching techniques will be emphasized in these areas.

Prerequisite: Industrial Arts 4383 and 4385.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.

*This course may not be taken as part of the major requirements in industrial arts.
Department of Psychology

R. Wade Wheeler, Professor and Chairman
Professors: Oles, Stimmel
Associate Professors: Bevilacqua, *J. M. Davis, **Ginsburg, Hardesty,
Merryman, Sikes, L. S. Wright
Assistant Professors: Durrett, Fling, S. M. Miller, Snodgrass
Instructors: G. D. Davis, Dochcn, Fahlinger, Gonzales, Hope, D. S. Johnson,
Matthews, Pugh, Schohwinski, Simmons
Lecturers: McMahan, Snapp

Notes:
1. Courses required for the major are: Psychology 2310, 3387, 3388, plus six
   semester hours chosen from 2315, 3315, 3319, 3330, 4325, 4338, plus three
   semester hours chosen from 3390, 4354, 4356, 4370, plus three semester
   hours chosen from 3317, 3320, 4317, 4348, 4361, plus nine additional
   advanced hours.
2. Psychology 2310 is a prerequisite to all other courses in the department.
3. All majors taking a Bachelor of Science degree must complete Biology
   1410 and 1420. Students electing the Bachelor of Arts degree may substi-
   tute Biology 1310 for Biology 1410.
4. If mathematics is substituted for the physical science requirements in the
   Bachelor of Arts degree, it must be at a level beyond Mathematics 1315,
   which is required of all majors. For the Bachelor of Science degree, any
   mathematics used to fulfill the 25 hour requirement in science or mathe-
   matics must be at a level higher than Mathematics 1315.
5. An undergraduate minor is psychology consists of Psychology 2310, 2330,
   plus 12 additional semester hours, of which six must be advanced.
6. Psychology may be chosen as a first or second teaching field.
7. If a student plans to attend graduate school in psychology the following
   courses are recommended as electives: Psychology 3390, 4325, 4356, and
   4370.
8. For students pursuing the Bachelor of Science degree, minors may be
   selected from biology, chemistry, computer science, geography (physical
   and applied), mathematics, physics.
9. Further, more detailed information and suggested degree plans may be
   obtained by requesting the Guide for Psychology Majors from the Depart-
   ment of Psychology.

Bachelor of Science Degree
Suggested Degree Plan

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*Faculty Development Leave, Fall (1/2) 1980, Spring (1/2) 1981.
**Faculty Development Leave, Fall, 1979.
### Bachelor of Arts Degree

**Suggested Degree Plan**

#### Freshman Year

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*Two semesters of work are required in chemistry, physics, or mathematics in addition to the required biology.*
### Bachelor of Science in Education Degree

#### Suggested Degree Plan

### Freshman Year

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<td>Speech Communication 1310</td>
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<td>Philosophy 1305</td>
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<td>Mathematics 1315</td>
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### Sophomore Year

<table>
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<td>Psychology 2315</td>
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<td>English (literature)</td>
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### Junior Year

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<td>Second teaching field</td>
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### Senior Year

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<tbody>
<tr>
<td>Psychology 4335, 6 hours advanced</td>
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<td>Education 4331, 4332, 4681</td>
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<td>Second teaching field and electives</td>
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Courses in Psychology

1320 The Psychology of Effective Learning. (3-0) A course emphasizing the acquisition and development of college level learning skills through study of the principles and the techniques of learning. May not be counted toward a major or minor in psychology.

2310 General Psychology. (3-0) A survey of the major principles derived from research on human and animal behavior. Topics studied include learning, thinking, motivation, emotion, personality, the senses, perception, and the form and functions of the nervous system.

Psychology 2310 is a prerequisite for all courses.

2311 The Psychology of Human Problems. (3-0) A psychological and physiological examination of the human sexual experience from conception through old age. Current research findings serve as a basis for study. Major consideration is given to human sexual system, the sexual act, sexual attitudes and behavior, and sexual complications.

2315 Human Psychological Development. (3-0) A survey of psychology of human development from the pre-natal period to adulthood. Emphasis is placed on cognitive, motivational and physiological processes of development in childhood and adolescence.

3315 Abnormal Psychology. (3-0) An introduction to the study of psychological abnormality: (1) issues in defining and evaluating it, (2) examples, (3) theories and research attempting to categorize, describe, and explain it, and (4) approaches used to prevent or change it when it is deemed a problem by the individual and/or society.

3317 Industrial Psychology. (3-0) The study of applying psychological knowledge and techniques in the modern industrial concern. Areas of study include employee needs, attitudes, selection, testing, boredom, motivation, anxiety, and job satisfaction.

3319 Social Psychology. (3-0) The study of how people influence each other. The course covers such topics as conformity, inter-personal attraction, prejudice, and aggression.

3320 Behavior Modification. (3-0) A study of the scientific principles of psychology which affect humans living and working in modern environments. Emphasis is placed upon human attitudes, emotions, leadership patterns, and adjustments to the world of work.

3330 Personality Dynamics. (3-0) A comprehensive introduction to research, theory, and application in the field of personality. Individual differences and situational influences are examined concerning authoritarianism, achievement motivation, anxiety, intelligence, self-concept, interpersonal attraction, aggression, sexuality, altruism. An integrative model is suggested for describing and predicting human behavior.

3378 Psychology of Consciousness. (3-0) This course provides an introduction to theory, research, and experimental applications in the study of consciousness. Topics include the findings and implications of post-Einsteinian science relevant to the study of consciousness.

3387 Statistics for the Behavioral Sciences. (2-2) The application of elementary descriptive statistics, statistical inference, and correlation and regression of sociological and other behavioral science data, with an emphasis on the relationship of theory and methods in the research setting. See Political Science 3387. Prerequisite: Mathematics 1315.

3388 Experimental Psychology. (2-2) Introduction to laboratory equipment and procedures, with basic instruction in experimental design, data collection
and treatment, and technical report writing. Several psychological experiments and research reports will be required of each student.

Prerequisite: Psychology 3387.

3390 Cognition and Perception. (3-0) The acquisition and use of knowledge, contemporary research on perception, pattern recognition, memory, thinking, problem solving, and language comprehension will be considered.

4317 Techniques and Dynamics of Interviewing. (3-0) The principles and techniques of interviewing emphasizing research findings relevant to appraisal and personnel assessment. The course is designed to acquaint the student with the findings and problems of interviewing skills.

4325 History and Systems of Psychology. (3-0) Study of the evolution of psychology as a science through a systematic review of the principal scientific and philosophic antecedents of modern psychology, and analysis of the status of the major contemporary theoretical schools.

4335 Theory of Psychological and Educational Measurements. (3-0) A study of the principles, concepts, and methods involved in the use of tests and inventories currently being used in the assessment of intelligence, aptitudes, interests, and personality, with emphasis on the proper administration, scoring and evaluation of psychological instruments.

Prerequisite: Psychology 3387.

4338 Adolescent Psychology. (3-0) A developmental psychology course designed to examine the complex characteristics of human cognitive and emotional life during the period of adolescence. Emphasis is directed toward the basis of behavior, interpersonal relationships, development, growth, and motivation.

Prerequisite: Psychology 2315.

4348 The Psychology of Group Processes. (3-0) A study of how the individual relates to his group membership. Students will analyze the development and functioning of their own groups with attention to such issues as: (1) problems faced by group members in the early phases of a group's existence, (2) leadership roles, (3) problems of group pressure, and (4) problems of trust.

Prerequisite: An introductory course in social psychology plus consent of the instructor.

4354 Ethology. (3-0) A consideration of the evolution and function of behavior as viewed from a biological base. The course includes a comparative analysis of species specific behaviors in man and lower animals. Laboratory periods will be devoted to observation and classification of behavior, as well as independent laboratory research.

4356 Physiological Psychology. (3-0) Research findings and theoretical concepts concerned with the physiological, anatomical, and pharmacological bases of behavior. Topics covered include the sensory systems, the physiological mechanisms of motivation, and the physiological correlates of associate processes such as learning.

4361 Introduction to Clinical Psychology. (3-0) Overview of clinical psychology with emphasis on current theories and methods of individual psychotherapy. Class discussion of readings, films, audiotapes, and live examples illustrating these approaches. Experimental learning via class exercises in pairs and small groups, and by role-playing both therapist and client in a series of helping sessions. Practical focus on developing relationship skills and job skills.

Prerequisite: Psychology 3315 and/or consent of the instructor. (Apply in advance).

4366 Advanced Child Development. (3-0) A consideration of current topics in child psychology with an emphasis upon cognitive, psycho-social, and affec-
tional processes of childhood. Consideration will also be given to research methodology involving children.

4370-5370 Psychology of Learning. (3-0) A study of the basic problems in the acquisition of responses, treating with such constructs as reinforcement, extinction, retention, forgetting, problem solving, motivation, and punishment. Major theories are treated through attention to classical experiments, but greatest emphasis is given contemporary research.

Prerequisite for Psychology 4370: Psychology 3388.

4375 Psychology of Instruction. (3-0) Preparation for students whose terminal objective is teaching psychology. Objectives: (1) The student will demonstrate (through written and practical examinations) mastery of basic classroom contingency management, i.e., specification, observation, consequation. (2) The student will demonstrate (through written examination) criterion performance in analyzing and critically evaluating recent research in instructional psychology. (3) The student will demonstrate (through written and practical examinations) mastery of major models of programmed instruction.

Prerequisite: Consent of the instructor.

4385-5385 Industrial Social Psychology. (3-0) Research findings and theoretical concepts concerned with social-structured problems in organizations. Topics covered include: The system concept, characteristics of social organization, organizational effectiveness, leadership communication, and decision-making.

4387-5387 Computer Applications in the Social and Behavioral Sciences and Education. (3-0) This course will prepare the student to effectively employ computers in instruction and research. Topics of study will include the collection and analysis of data, human experimentation, instructional techniques, modeling and simulation, and natural language processing.

*4390 Selected Topics in Psychology. (3-0) Tutorial sessions focusing in-depth on a selected topic of great interest in psychology. Topics must be within the scope of 3000 or 4000 thousand level psychology courses presently in the catalog. Open to junior and senior students by invitation of instructor, and consent of the chairman.

4395 Individual Studies in Psychology. (3-0) Open to senior level psychology majors upon invitation of the department. Studies will be either a research project or field work supervised by a faculty member.

Prerequisite: Psychology 3388. May be repeated once for credit, but only three hours apply toward the minimum hours for a major.

The following course is offered also in the Department of Sociology:

3319 Social Psychology. (3-0)

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
Department of Special Education

Charles H. Dolezal, Associate Professor and Chairman
Professors: Ward, Zedler
Associate Professors: Brooks, Dominguez, Mallard
Assistant Professor: S. L. Lewis
Instructors: Campbell, Fuller, Hart, McCall, Riddell, Shaw
Director of Speech, Hearing, and Language Clinic: McCall

Note:
Persons entering the field of speech pathology and audiology should prepare to meet requirements for a Master's degree or its equivalent as set forth by the American Speech and Hearing Association for certification of clinical competence.

Bachelor of Science in Education Degree
(Minimum 128 semester hours; includes certificate)

Note:
All candidates for degrees should keep in mind that a total of 12 semester hours are required from two of the three areas of science, mathematics, and modern language. General Science 3310, 3320, and Mathematics 3311 (or 3315) will count toward this requirement; Mathematics 4302, however, will not.

1. With certification in elementary education, Language/Learning Disabilities and/or Physically Handicapped (Minimally-Brain-Injured), and with pre-professional training in Speech Pathology.

Note:
By careful choice of a specialization (minor), so as to complete both parts A and B of either Plan I or Plan II of the elementary education curriculum, a student can also prepare for certification as a classroom teacher. The director of elementary education, as well as the chairman of the Department of Special Education, should be consulted no later than the sophomore year to assure fulfillment of requirements in both areas. With careful and early planning with advisers, the number of hours may be reduced. Most students need to attend at least one additional summer semester to complete this dual program.

A. Certification — Language/Learning Disabilities and Elementary Education.
(Suggest Plan II — English for Specializations for Elementary Education)

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<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
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<td>Special Education 1331, 2359</td>
<td>6</td>
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<td>Speech Communication 1310</td>
<td>3</td>
<td>Political Science 2310, 2320</td>
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<td>English 1310, 1320</td>
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<td>English 2330, 2340</td>
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<td>History 1310, 1320</td>
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<td>Art 3323</td>
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<td>Mathematics 1315</td>
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<td>Philosophy 3201 (or 1305)</td>
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<td>Art 1354</td>
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37-41
### Junior Year

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<th>Course</th>
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<tr>
<td>Education 3311, 3320</td>
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<td>General Science 3310, 3320</td>
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<td>Art, Theatre Arts, or Music</td>
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<tr>
<td><strong>Psychology 3387</strong></td>
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<td><strong>Art 3323, Education 3321, Education 3323</strong></td>
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### Senior Year

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<td>Education 4321, 4323, 4324, 4380, 4385(m)</td>
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<td>Mathematics 4302</td>
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<tr>
<td>***Health Education 3375</td>
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<td>Psychology 4370</td>
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<tr>
<td>English 3312 or 3319, 3333</td>
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<td>or 3335, 3385, 4310</td>
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### B. Certification — Elementary Education with Pre-Professional

##### *****Speech Pathology and Audiology

(Suggest Plan II — English for Specialization for Elementary Education)

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<th>Freshman Year</th>
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<td>1310</td>
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<td>History 1310, 1320</td>
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<td>Mathematics 1315</td>
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<td>Art 1354</td>
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<td>Music 1311</td>
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<td>Specialization</td>
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<td>Physical Education activity</td>
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35-36

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<th>Sophomore Year</th>
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<td>Special Education 2320, 2362(g), 3389</td>
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<td>English 2330, 2340</td>
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<td>Psychology 2310</td>
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<tr>
<td>Philosophy 3201 (or 1305)</td>
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<td>Specializations</td>
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<td>Physical Education activity</td>
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*Mathematics 1311 or 1315, General Science 3310, 3320, plus three hours of Mathematics/Science of Mathematics 1311 or 1315, Biology 1310 or 1410, 1420, plus General Science 3310 will count toward the 12 semester hour Mathematics/Science requirement for Academic Foundations.

**Taught during summer only.

***Choose two courses for Elementary Education Content.

****Recommended for Graduate School background course.

*****Such students should not expect to complete requirements for certification in speech pathology at the undergraduate level.
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<thead>
<tr>
<th>Junior Year</th>
<th>Hours</th>
<th>Senior Year</th>
<th>Hours</th>
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<td>Special Education 3330, 4368, 4370, approved advanced three hours</td>
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<td>Education 3311, 3320</td>
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<td>Education 4321, 4323, 4324, ****4385(g), 4680</td>
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<td>*General Science 3310, Biology 1310 or 1410, 1420</td>
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<td>Mathematics 4302</td>
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<td>Art, Theatre Arts or Music 3213 (or 2300)</td>
<td>2-3</td>
<td>Psychology 3387</td>
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<td>***Art 3323, Education 3321, Education 3323</td>
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<td>***Health Education 3375</td>
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</table>
Special Education 4371, *The Exceptional Child in the Family.*  
Special Education 3366(f), *Clinical Practicum.*  
Special Education 4363, *Differential Diagnosis of Communicative Problems.*  
Special Education 4365, *Education of the Neurologically Impaired.*  
Special Education 4368, *Methods and Materials for Teaching Pupils With Specific Language Disabilities.*  
Special Education 4373, *Structured Language for the Slow Learner.*

III. For certification to teach Language/Learning Disabilities. Certification in elementary or secondary (whichever is applicable) classroom teaching; in addition:

A. Directed Teaching  
Three semester hours in directed teaching for regular classroom, Education 4380 (elementary) or 4381 (secondary).

Three semester hours in directed teaching for special education. Language/Learning Disabilities Education 4385(m) (Language/Learning Disabilities) or Education 4386(m) (secondary) (Language/Learning Disabilities).

B. For certification in Language/Learning Disabilities in addition to (a) the student teaching described in A above; (b) a baccalaureate degree, (c) Academic Foundations, and (d) an elementary or secondary teaching certificate, the following courses will be required:  
Special Education 3360, *Education of Exceptional Children.* (Survey)  
Special Education 4368, *Methods and Materials for Teaching Pupils with Specific Language Disabilities.*  
Prerequisite: Special Education 4373.  
Special Education 3330, *Introduction to Language and Learning Disorders.*  
Prerequisite: Special Education 1331, 2359; 2362(m), and 2370.  
Special Education 3366(m), *Clinical Practice in Special Education.*  

Note:  
It is to be understood that students will not be admitted to the Language/Learning Disabilities certification program without appropriate backgrounds of preparation in the areas of language and learning. With foresight in planning electives and specializations in the baccalaureate degree program, however, most students should be able to complete dual certification programs for regular classroom and Language/Learning Disabilities teaching by attending one additional summer session. The competencies which will be required as background will be in the following areas: Normal language development in children, history of development of the English language, linguistics, phonetics, language deviations, the structuring of language for slow learners, and general psychology. Careful choice of courses within Academic Foundations, free electives and subject specializations in English, speech and language arts can result in these competencies, however. The student anticipating Language/Learning Disabilities certification should consult with the chairman of the Department of Special Education no later than the sophomore year to insure appropriate background.

IV. For certification to teach the mentally retarded.  
Certification in elementary or secondary (whichever is applicable) classroom teaching; in addition:  
Special Education 1331, *Introduction to Communication Disorders.*  
Special Education 2359, *Phonetics.*
Education 4385(e), **Directed Teaching in Special Education** (Mentally Retarded) — Elementary
or
Education 4386(e), **Directed Teaching in Special Education** (Mentally Retarded).

Special Education 4371, **The Exceptional Child in the Family**.
Special Education 3360, **The Education of Exceptional Children**.
Special Education 3365, **Introduction to Mental Retardation**.
Special Education 4364, **Psychological Problems of the Mentally Retarded**.
Special Education 4366, **Curriculum and Methods for the Mentally Retarded**.
Special Education 4368, **Methods and Materials for Teaching Pupils With Specific Language Disabilities**.
Special Education 4373, **Structure Language for the Slow Learner**.

**Bachelor of Science in Education Degree**
(Minimum 128 semester hours; includes a certificate)

**Note:**
If the student wishes to be certified in the area of mental retardation with the Bachelor of Science in Education degree, he will follow the curriculum below:

<table>
<thead>
<tr>
<th></th>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
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<td>Special Education 4364, 4366</td>
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<td>Education 4321, 4323, 4324, 4385(e), 4680</td>
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<td>Special Education 4371</td>
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<td>*Health Education 3375</td>
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*Choose two courses for Elementary Education Content.*
## General Courses

**3322 Teaching Exceptional Children in the Regular Classroom.** (3-0) Survey course to orient prospective teachers to problems related to education of exceptional children who are mainstreamed into the regular classroom. Visiting lecturers, films, demonstrations supplement classes.

**3360 The Education of Exceptional Children.** (3-0) Survey course to orient students to the program and problems related to education of all types of exceptional children. Visiting speakers, field trips, films, demonstrations supplement lecturers.

**3366 Clinical Practice in Special Education.** (3-0) Supervised clinical practice for the various areas of special education. Area indicated according to the following section code: (n) Audiology, (e) Mental Retardation, (f) Physically Handicapped or Minimally Brain Injured, (g) Speech and Hearing Therapy, (m) Language/Learning Disabilities.

Note: Clinical, as well as academic competence will be graded. Student’s aptitude and ability (a) to establish appropriate interpersonal relationships with clients and parents, and (b) to implement clinical methods which will be carefully evaluated, and will serve as criteria for permission to take additional courses toward certification in special education.

**4310 Selected Topics in Special Education.** (3-0) In-depth study of selected topics of current interest in special education. Work done on independent study basis with faculty member and available only with permission of department.

**4369 Introduction to Speech Science.** (3-0) Introduction to principles, procedures, and literature of major areas of speech science, including physiological and acoustic experimental phonetics, psycho-acoustics and psycholinguistics. Knowledge and use of instrumentation stressed.

## Courses in Audiology

**2320 Introduction to Hearing Science.** (3-0) Content includes the physics of sound, basic psycho-acoustics, anatomy and physiology of the ear, and disease processes and dysfunctioning of the ear.

**3389 Introduction to Audiology.** (3-0) Basic methods and problems in auditory testing. (S)

**4370 Aural Rehabilitation.** (3-0) A basic course in rehabilitation of the acoustically impaired.

## Courses in Speech Pathology

**1331 Introduction to Communication Disorders.** (3-0) Speech, hearing, and language disorders; descriptions of the various disorders, and their etiologies; may be used as an elective, but is a required course for all students preparing for certification in speech pathology and audiology.

**2359 Phonetics.** (3-0) Detailed study of the phonemes of American-English speech. Proficiency in use of the alphabet of the International Phonetic Association will be emphasized.

**2362 Clinical Principles and Procedures in Special Education.** (3-3) (Observations). Principles and procedures for therapy, and/or for clinical and prescriptive teaching for various areas of special education. Area indicated according to section code listed for Special Education 3366.
Minimum of 25 clock hours of observation of therapy and/or management of clinical cases is required.
Prerequisite: Special Education 1331 and 2359, or special permission.

3325 Anatomy and Physiology of the Vocal Mechanism. (3-0) Description and explanation of the human mechanism of speaking. (F)

4301 Speech Pathology. (3-0) Nature and underlying causes of defective speech; opportunity for students to investigate etiologies and procedures advanced by authorities. Clock hours of supervised clinical practice may be obtained.

4317 Speech and Hearing Therapy in Public Schools. (3-3) Designed to train students of speech pathology for employment in public schools. Emphasis upon screening, evaluation, scheduling, and management procedures. Must precede practicum in public school speech therapy.

4363 Differential Diagnosis of Communication Problems. (3-0) Provides opportunity for student to develop proficiency in differential diagnosis of communication disorders through lecture, discussion, and clinical experience. Testing procedures, use of observational cues, and report writing emphasized.

4371 The Exceptional Child in the Family. (3-0) Develops understanding and professional skill of special education teachers and clinicians in counseling parents of exceptional children. Parents of children enrolled in demonstration classes or in clinic participate in class.

4373 Structured Language for the Slow Learner. (3-0) Basic factors of oral and written English: Vocabulary, syntax, rhythm, and intonation, and sound elements that create academic difficulties for pupils with specific language disorders derived from environmental influences or neurological impairment.

Courses in Teaching the Minimally Brain Injured and/or Language/Learning Disabilities

2370 Speech and Language Development. (3-0) Course to acquaint student with child’s normal acquisition of language. Current information from linguistics, psycholinguistics, and speech pathology examined and language of children in various stages of development recorded and studied.

3330 Introduction to Language Learning Disabilities. (3-0) Course introduces student to specific language disorders which adversely affect child’s ability to learn emphasis upon concept of developmental dyslexia.

4365 Education of the Neurologically Impaired. (3-0) Basic characteristics of physical disorders resulting in minor dysfunction and/or learning disabilities; lecturers from medical and para-medical fields assist in teaching.

4368 Methods and Materials for Teaching Pupils With Specific Language Disabilities. (3-0) Teaching elementary classroom subject matter such as reading, spelling, and arithmetic to pupils with physical handicaps. Special emphasis upon teaching child with cerebral palsy and related disorders.
Prerequisite: Special Education 2359 and Special Education 4373, or their equivalents.

Courses in Teaching the Mentally Retarded

3365 Introduction to Mental Retardation. (3-0) Study of social, emotional, physical, and learning characteristics of the mentally retarded. Methods of classifying, diagnosing, and treating retarded children discussed from the medical, psychological, sociological, and educational points of view.
4364 Psychological Problems of the Mentally Retarded. (3-0) Course dealing with theories of intellectual deficiency. Etiologies and psychical mechanisms of mental retardation studied to provide bases for improvement in performance of retarded pupils.

4366 Curriculum and Methods for the Mentally Retarded. (3-0) Course in the development of curriculum and methods suited to particular problems with the mentally retarded. Attention given to philosophy, methods, and materials adapted to various age grouping; pupil guidance and evaluation; study of suitable job outlets and work experience.

Courses for Special Education Offered in the Departments of Education, Psychology, and English

Education 4385 Directed Teaching in Special Education (Elementary).
Education 4386 Directed Teaching in Special Education (Elementary).
English 3319 The Development of English.
Psychology 2310 General Psychology.
Psychology 3387 Statistics for the Behavioral Sciences.
Psychology 4315 Mental Hygiene
Psychology 4370 Psychology of Learning.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
School of Health Professions

Don C. Green, Ph.D., Dean
Department of Allied Health Sciences ... Robert T. Mooney, M.Ed., Chairman
Department of Health Administration ... Vernon D. Seifert, M.P.H., Chairman
Department of Allied Health Sciences

Robert T. Mooney, Associate Professor and Chairman
Professor: D. C. Green
Associate Professors D. F. Bell, Falleur, Welborn
Assistant Professors: D. L. Bell, Caruana, Clonts, C. M. Johnson, Knox, Kostboun, Upchurch
Lecturers: Bradford, Clark, Core, D. R. Edwards, Harkins, Wharton
Medical Director, Respiratory Therapy Program: George J. Handley, M.D.
Medical Director, Medical Technology Program: Robert W. Gaylord, M.D.
Adjunct Faculty: Blumer, Brice, Fisher, Guimarin, Handley, Haycraft, Hollandier, Lindsey, M. C. Moore, Petroff, Stich
Clinical Faculty: Virginia M. Acker; Herman R. Adams, Ph.D.; Lyla Adams; Claudia J. Appledorn; Edna Atkinson; Clara B. Baker; Viola B. Baker; Sandra Bazemore; John C. Bennett; Helen Blint; Edgar Boehme; Ernest P. Boulette, III; Cleo Boulter; Susan Bragg; Jean Branon; Adele Brown; Charleen Brown; Dianna Brozich; Katie Burrows; Marge Caddell; John Callihan; Darlene Cantu; Michael L. Chesnutt; Eunice H. Coffee; Lucille Coffey; Dayle Collins; John B. Coulter, Ph.D.; Donna J. Dach; Kathryn Davis; Ron Davis; Monica DeMaio; Ruth Dryer; Joan Dunphy; Charles Easley; Robert K. Emerson; Norma Field; Carolyn Fields; Sonja Fogle; Donald Foster, Ph.D.; Alicia Gale; Salvador E. Gamez; Janie Garcia; Robin Garner; Robert W. Gaylord, M.D.; Robert Gevedon; Rebecca Gilliland; June L. Girotat; Charles Glazener; Wiley Guillen; Tanya Harkins; Susan Hawthorne; Melvin Hetherly; Phyllis Hinkle; Olivia Hooker; Trina Horvath; Georgia Hutrya; Marjorie B. Janes; Joe Jeter; Kort Jobec; Diane Johnson; Thomas Johnson; Shirley Jones; Donald A. Jutzy, M.D.; Gregory Keeney; Farrar Keetch; Linda Keith; Karen Kovan; Daniel J. Ladd, M.D.; John Lawton; Katherine Lincoln; Richard Loewen; Susan Lovel; David Lynn; Jerry Lyon; Nancy D. Mabry; Sherry Maddoux; Donald Malone; William Marshall; Mary C. Martin; William B. McCombs, M.D., Ph.D.; John McCormick; Elaine C. McCoy; Albert McIntyre; Emmett McPherson; Michael A. Merritt; Elizabeth Michel; Opal Miller; Marie Morgan; Troy L. Morrow; Elizabeth Motle; Richard V. Patino; Levern Parker; Guy Pearson; Patsy F. Perry; Jean Persky; Phyllis Persky; Bob Phelan; Jo Lynne Phinizy; Delores Pinkney; Katherine M. Pouls; Daniel M. Queen, M.D.; Sandra Randall; Susan Rapp; Judith Robinson; Anita Reising; Judith Robinson; Elizabeth Rhoads; Eufroma Rodil; Kimberlin Rylander; Brenda Sadri; Clarissa Samuel; Marie Saunders, Ph.D.; Lynda Schumann; Joanna Seamins; Georgia Sehon; Alvin O. Severance, M.D.; Steve Simpson; Doris P. Sinclair; Marion Smetana; Charles Smith; Wanda Smith; Mary H. Sosa; Michael Sparrow; A. M. Spekerman, Ph.D.; Doylean Sprauve; Annette Stark; Lucina Suck; Michele Symm; Regina Taylor; Ann Teague; Robert Travis; Judy Miller Trojan; Sheron Vanderveer; JoAnn Viney; Marcia Walker; Lynda Wesley; Richard L. Welch; Saul Wylen, M.D.

Liability Insurance

1. Both students and faculty who participate in the clinical portion of the Southwest Texas Allied Health Programs, are required to purchase malpractice insurance.
2. Students will be required to purchase insurance to demonstrate that they are insured.
3. Students may obtain information on liability insurance from the Office of the Dean of the School of Health Professions.
Pre-Professional: Students interested in areas of Allied Health should contact the Department of Allied Health Sciences for counseling.

Degrees Offered

Associate in Applied Science

Major: *Respiratory Therapy

(Students enrolled in respiratory therapy see information on liability insurance above.)

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<tr>
<th>First Semester</th>
<th>Second Semester</th>
<th>Hours</th>
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<td>Respiratory Therapy 1210,</td>
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<td>1313, 1314, 1330</td>
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Summer Session

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Sophomore Year

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<th>Hours</th>
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<td>Respiratory Therapy 2340</td>
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<td>English 1310</td>
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Summer Session

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<td>2312, 2313</td>
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Associate of Arts Degree

Preprofessional courses for Baptist Memorial Hospital School of Nursing program:

| English 1310, 1320                  | 6     |
| Biology 2340, 2350                  | 6     |
| Chemistry 1410                      | 4     |
| Sociology 2310                      | 3     |
| Psychology 2310                     | 3     |
| Biology 2440                        | 4     |
| Home Economics 3313 (or Psychology 2315) | 3     |
| Home Economics 2335 (or 3339)      | 3     |

*Students desiring admission to the Respiratory Therapy Program must apply through the Department of Allied Health Sciences in addition to regular University admission procedures.
The above courses are required for admission to the Baptist Memorial Hospital School of Nursing program. Students must apply and be accepted by Baptist Memorial Hospital School of Nursing. It is recommended that applicants discuss their course plans with the School of Nursing prior to enrollment at Southwest Texas State University.

Students admitted to the Baptist Memorial Hospital School of Nursing will take twenty-one months of nursing courses. Upon satisfactory completion of the Baptist Memorial Hospital School of Nursing program the students will be credited with the following 39 semester hours and awarded an Associate of Arts degree from Southwest Texas State University.

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<tr>
<th>Course</th>
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<td>Nursing 2322</td>
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<td><strong>Total</strong></td>
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**Bachelor of Science in Health Professions**

**Major: Health Professions**

**Specializations: Allied Health Education, Allied Health Research**

I. Sixty-five semester hours and an Associate degree (or its equivalent) in an area of allied health.

II. Core curriculum of 31 semester hours:

- History 1310, 1320 6 hours
- Political Science 2310, 2320 6 hours
- English 1310, 1320 6 hours
- English 2351 (or literature) 3 hours
- Electives (to be selected by Allied Health adviser) 10 hours

III. Major—32 semester hours

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<td>Allied Health Sciences 4441</td>
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**Total** 32 hours
Bachelor of Science in Medical Technology

Major: Medical Technology

(Students enrolled in medical technology see information on liability insurance.)

**Freshman Year**

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**Sophomore Year**

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<td>Physics 1410, 1420</td>
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<td><strong>Mathematics 1308</strong></td>
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<tr>
<td>Medical Technology 2414, 3330</td>
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<tr>
<td>Political Science 2310, 2320</td>
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**Junior Year**

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Biology 3440, 4445</td>
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<tr>
<td>Chemistry 3410</td>
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<tr>
<td>English 2351 (or literature)</td>
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<td>Health Administration 4324</td>
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<td>Medical Technology 3410, 3412, 4324</td>
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<tr>
<td>Psychology 3387</td>
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**Senior Year**

<table>
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<tr>
<td>***Medical Technology 4380, 4470, 4550</td>
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<tr>
<td>4122, 4223, 4318, 4360, 4560</td>
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<td>4125, 4261, 4561, 4562</td>
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<tr>
<td>***Medical Technology 4380, 4470, 4550</td>
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<tr>
<td>4122, 4223, 4318, 4360, 4560</td>
<td>14</td>
</tr>
<tr>
<td>4125, 4261, 4561, 4562</td>
<td>13</td>
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</tbody>
</table>

**Total Hours: 143**

Courses in Allied Health Sciences

1210 **Pharmacology.** (2-0) Designed to familiarize student with general principles of drug action, methods of administration, elements of dispensation and with adverse reactions to drugs.

1310 **The Health Care System and Professionals.** (3-0) Comprehensive study of the professional fields, their relationship to each other, and professional responsibilities. Structure of health care system including hospital organization, health care agencies, role of the government and professional ethics.

2440 **Principles of Microbiology.** (3-3) Basic principles of microbiology, morphology, physiology, immunology and the relationship of microorganisms to diseases. Designed primarily to meet requirements for students in nursing, inhalation therapy and other programs not requiring more than one semester of microbiology. Course may not be credited toward a biology major or minor or secondary teaching field. See Biology 2440.

3341 **Interdisciplinary Issues, Techniques, and Applications.** (2-3) Designed to create an awareness of current issues in health care delivery system, to acquaint student with techniques of new skill areas and to afford student an opportunity to apply those techniques. Area of concentration will be selected. Course may be repeated with permission of Chairman.

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*Allied Health Science 1310 may be substituted for Medical Technology 1215.

**Three hours of mathematics may be substituted for Mathematics 1308 with approval of adviser.

***Students complete their senior year of professional courses at the University’s affiliated clinical and teaching facilities in Temple. The senior year consists of 12 months (4 semesters) of medical technology lecture/laboratory course work, and clinical rotation in the medical laboratories affiliated with the University: the Veteran’s Administration, Scott & White, Kings Daughters, and Santa Fe hospitals.

****May be repeated with permission of chairman if topic studied is different.
4121 Problems in Allied Health Sciences. (1-0) In-depth study of a singular problem considered to be of immediate concern to health care industry. Special emphasis on problems unique to educators and trainers in allied health field.

4221 Problems in Allied Health Sciences. (2-0) In-depth study of a narrow range of topics considered of immediate concern to health industry. Special emphasis on those problems unique to educators and trainers in allied health field.

4321 Problems in Allied Health Sciences. (3-0) Study of the most relevant problems being faced by health care industry on a state and national level. Special emphasis on selected topics that pose problems unique to educators and trainers in allied health field.

4322 Evaluation of Instructional Competence. (3-0) Designed to improve instructional competence of allied health instructors. Importance will be placed on the analysis of teaching competencies gained through objective evaluation of instructional performance. Demonstration of teaching techniques and self evaluation.

4323 Clinical Teaching. (3-0) Emphasis on the media of communication in classroom and clinical settings, teaching methods and techniques, classroom management and supervision of clinical students.
Prerequisite: Allied Health Sciences 4330.

4330 Classroom Management and Instructional Techniques. (3-0) Foundations, principles and objectives of allied health instruction, with emphasis on lesson plan construction, writing of behavioral objectives, media of communication, teaching techniques and classroom management.

4331 Instructional Media in the Health Sciences. (3-0) Designed to promote an awareness of multi-media as an effective classroom tool in teaching-learning process. Area of concentration will be selected. Course may be repeated with permission of Chairman.

4371 Educational Psychology in Allied Health. (3-0) Study of scientific concepts of learning and the principle influences in learning process. Consideration of effects of development, aptitude, emotional and social maturation as well as environmental influence on learning.
Prerequisite: Allied Health Sciences 4330.

4373 Testing and Evaluation in Classroom and Clinical Settings. (3-0) Planning, construction, analysis and evaluation of written and performance tests. Test item analysis, reliability and validity studies, interpretation of test scores and performance evaluation in the clinical setting.
Prerequisite: Allied Health Sciences 4330.

4440 Directed Independent Study. (8-0) The student's background will be reviewed by a faculty adviser. Assignments will be made by the faculty to promote uniformity of his professional competence at the baccalaureate level in allied health science. Experiences providing opportunities for the student to participate in the observation, supervision, and application of didactic and clinical teaching will be assigned.
Prerequisite: Allied Health Sciences 4323, 4330, 4373, and approval of chairman.

4441 Practicum Internship. (8-0) Practical educational experience for allied health majors under the supervision of a member of the allied health faculty. This experience will be conducted in a setting appropriate to educational/training programs in the health field.
Prerequisite: Allied Health Sciences 4440 and approval of chairman.

*Course may be repeated if the problem studied is different.
Courses in Respiratory Therapy

Only those students accepted in the Respiratory Therapy Program are allowed to take these courses. Application must be made through the Department of Allied Health Sciences. This is in addition to regular University admission procedures. All students entering this program must be accepted by both the University and the Respiratory Therapy Program.

Applications to this program must be submitted between December 1 and April 1 each year. All applicants will be notified as to their status prior to May 1. Each class begins on the first day of the regular fall semester.

The program is fully approved by the American Medical Association and qualifies graduates to sit the National Registry Examination when all requirements are completed. An Associate in Applied Science degree is awarded to each student satisfactorily completing the program. In addition, a certificate of completion will be granted only to those receiving their degree. The requirements for the degree and the certificate are exactly the same.

1210 Cardiopulmonary Anatomy and Physiology. (2-0) Designed to acquaint the student with the anatomy and physiology of the cardiovascular and pulmonary systems. The student will also be introduced to terminology used in respiratory physiology.

1211 Clinical Medicine I. (4-0) Designed to acquaint student with basic concepts of medical practice. Specific medical problems will be discussed from an etiological, symptomatic, diagnostic, therapeutic and prognostic point of view. Clinical Drugs, Cardiology, Hypoxemia, Ventilatory Abnormalities, Acid Base Physiology, Control of Respiration, Mechanical Ventilation and Physical Diagnosis of the chest.

1212 Clinical Medicine II. (4-0) Designed to acquaint student with basic concepts of medical practice. Specific medical problems will be discussed from etiological, symptomatic, diagnostic, therapeutic and prognostic point of view. Topics to include: Airway Disease, Emphysema, Compliance Diseases, Cardiac failure, Chest Wall Diseases, Pleural Diseases, Neuro-muscular and CNS diseases and Neoplastic Diseases.

1313 Introduction to Respiratory Therapy. (3-0) Introductory course to field of respiratory therapy. Designed to acquaint student with responsibilities of technician as a member of health team. Airway management, gas therapy and humidity therapy will be covered.

1314 Respiratory Therapy Instrumentation I. (3-0) Designed to teach the design, function, and operation of basic respiratory therapy equipment. Regulators, flowmeters, humidifiers and nebulizers will be covered.

1315 Basic Technology in Respiratory Therapy. (3-0) Designed to teach students basic principles of respiratory therapy techniques and basic operations of equipment. Artificial ventilation, cardiopulmonary resuscitation and chest physiotherapy will be covered.

1316 Respiratory Therapy Instrumentation II. (3-0) Acquaints student with concepts of design, function and operation of more advanced respiratory therapy equipment. Pressure cycled ventilators, spirometers, airways, cardiopulmonary resuscitation equipment will be covered.

1330 Respiratory Therapy Clinical Laboratory I. (0-10) Supervised observation and practice in a respiratory therapy department. Designed to introduce student to hospital atmosphere.

1340 Respiratory Therapy Clinical Laboratory II. (0-10) Students perform standard respiratory therapy procedures in clinical setting under supervision. Prerequisite: Respiratory Therapy 1330.
1430  Respiratory Therapy Clinical Practice I. (5 weeks) Under close supervision students perform standard respiratory therapy procedures in clinical setting. Offered only during the summer.

1440  Respiratory Therapy Clinical Practice II. (5 weeks) Students will perform respiratory therapy procedures under direct supervision of qualified respiratory therapists. Emphasis placed on assisted and controlled ventilation, administration of drugs and special therapeutic techniques.

2220  Respiratory Therapy Literature. (2-0) Designed to permit the student to review and abstract both classic and recently published respiratory therapy articles.
Prerequisite: Respiratory Therapy 2430.

2241  Respiratory Therapy Seminar I. (4-0) Designed to acquaint student with the more commonly encountered respiratory diseases. Specific medical problems will be presented by students to physicians and therapists. Diseases covered will include ARDS, COPD, CF and Asthma.

2242  Respiratory Therapy Seminar II. (4-0) Designed to acquaint student with more commonly encountered respiratory diseases. Student will present case presentations to physicians and therapists. Simulated written registry examinations given to all students. Diseases specifically covered are Pulmonary Edema, HMD, Pulmonary Fibrosis, Bronchiectasis and Pneumonia.

2310  Medical Surgical Rounds I. (0-12) Designed to broaden student’s understanding and knowledge of medical and surgical techniques and their implications to therapy. Rotation through areas of medicine including general surgery, thoracic surgery, pediatrics, anesthesia, medicine and others.
Prerequisite: Respiratory Therapy 2340 and 2311.

2311  Applied Pathology. (3-2) Series of lectures by therapists on general techniques, physiology, pathology, cardiac disease, pulmonary disease and failure, including obstructive and restrictive diseases, abnormalities of airways and pediatric respiratory care. Laboratory includes patient assessment, (auscultation, x-ray interpretation, etc.), and observation of proper approach to care of cardiopulmonary patients.

2312  Clinical Internship I. (0-30) Gives the student an opportunity to correlate previous instruction with clinical experience. Expertise will be developed in advanced aspects of respiratory therapy technology.
Prerequisite: Respiratory Therapy 2310 and 2311.

2313  Clinical Internship II. (0-30) Augmentation and continuation of Respiratory Therapy 3312, with addition of clinical teaching of respiratory therapy, including preparation, presentation, supervision and evaluation.
Prerequisite: Respiratory Therapy 2312.

2326  Topics in Respiratory Therapy. (3-0) Designed to survey respiratory therapy problems and related topics. Student will review multiple written and oral examination materials.

2340  Clinical Practice III. (0-8) Required procedures will be performed in an intensive care unit including continuous ventilation, airway care, etc. Student will practice in the cardiopulmonary department doing such procedures as lung volume studies, blood gas analysis and others.
Prerequisite: To be taken concurrently with Respiratory Therapy 2430.

2430  Advanced Respiratory Therapy Technology. (3-3) In-depth study of selected respiratory therapy techniques and emphasis on care of critically ill patients. Volume ventilation, diagnostic techniques, monitors and rehabilitation are covered.
Prerequisite: Respiratory Therapy 1430 and 1440.
Courses in Nursing
(Only those students accepted in the Baptist Memorial Hospital School of Nursing may take these courses.)

2320, 2321, 2322, 2410, 2411, 2412 Nursing I. (18 weeks) During first semester basic principles of nursing care are introduced. These principles are foundations for administering nursing care to adult medical-surgical patients. Daily hygiene, nutrition and diet therapy, inflammation, immobilization, wound classification, neo-plasms, pre- and post-operative observations and diagnostic testing are introduced. These areas are expounded on in subsequent courses which include medical-surgical patients with specified disease entities. Principles of pharmacology and administration of medications are presented in order to integrate in later courses. Correlated subject matter includes history and trends in nursing. The principles and skills in the nursing care of adult patients with specified medical-surgical conditions are presented and discussed. Theoretical material focuses on uncomplicated conditions which serve as background for care of more complex conditions as the program advances. Specific areas included are pulmonary infections; the process of atherosclerosis; integumentary inflammations; urological infections; eye, ear, nose and throat inflammations; neurological inflammations and infections of the gastro-intestinal tract. Observational opportunities in a variety of community agencies are provided.

2323, 2324, 2325, 2326, 2327, 2328 Nursing II. (18 weeks) Principles of nursing care of adult medical-surgical patients is continued with emphasis on more complex conditions. Specific conditions included are: musculo-skeletal problems resulting from immobilization; occlusive arterial problems; neurological lesions and injuries; conditions of the eye, ear, nose and throat requiring surgical intervention; skin disorders requiring grafting; venus disorders; gastrointestinal disorders requiring surgery; blood dyscrasias; and lesions of the lung. Endocrinology, chronic obstructive pulmonary diseases, essential and renal hypertension, gynecological disorders, tumors of the integumentary system, urological surgery, carcinoma of the gastrointestinal tract, cardiac arrythmias, and vascular surgery are topics discussed. Principles of asepsis are presented with rotation through the surgical suites and recovery room.

Courses in Medical Technology

Student Selection for the Clinical Year in Medical Technology

Southwest Texas State University’s Medical Technology program has its own affiliated clinical and teaching facilities in Temple, Texas, and laboratory affiliations with the Veterans Administration, Scott and White, Santa Fe, and King’s Daughters hospitals. The curriculum is accredited by the Committee on Allied Health Education and Accreditation (CAHEA) in cooperation with the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Graduates are qualified to take the certification examination for medical technologists given by the Board of Registry of the American Society of Clinical Pathologists.

Students are selected in the fall semester of their junior year for the following June class. Because of the limited number of students that can be accepted for the senior year (15 students/year), and the growing number of qualified students competing for these spaces, we encourage students to maintain an overall grade point average of 3.0 or higher (on a four-point scale). Acceptance into the University and declaration as a medical technology major does not imply that the student will be accepted for the senior year. The criteria used for student selection includes scholastic ability, particularly in the sciences, letters of reference,
and a personal interview. Student selection is not made on the basis of sex, race, creed, or national origin.

Applications for the senior year must be in by November 15. The application must be accompanied by an updated transcript that indicates all courses taken at this University as well as courses taken at other colleges and universities. Applicants will be notified of their acceptance or rejection by January 31. A student accepted into Southwest Texas State University’s medical technology clinical program may decline said appointment, and, may pursue alternative routes consistent with University requirements. Such alternative routes may also be pursued by those students who are not accepted into the program in their junior year.

1215 Introduction to Medical Technology. (2-0) Presentation of information about the profession of medical technology, various phases of laboratory medicine involved and its functions and responsibilities as a unit of health team.

2414 Introduction to Medical Laboratory Techniques. (3-3) Medical Technology students will be introduced to techniques, procedures and instrumentation commonly used in the clinical laboratory.

3330 Pathology for the Allied Health Sciences. (3-0) Fundamental principles of disease processes such as inflammation, tissue injury and repair, immune response, neoplasia, genetic disorders and methods for detection and diagnosis of disease.

Prerequisite: Biology 2340, 2350, or 2430.

3410 Clinical Chemistry I. (3-3) Designed to acquaint the medical technology student with some of the basic concepts, procedures, techniques and instrumentation in clinical chemistry.

Prerequisite: Chemistry 1410, 1420, 2130, 2330, 2450.

3412 Hematology/Coagulation I. (3-3) Qualitative and quantitative evaluation of formed elements of the blood and studies in coagulation abnormalities.

Prerequisite: Biology 2340, 2350, or 2430.

4122 Medical Parasitology. (1-3) Lectures and laboratory instruction in animal parasites producing disease in man with emphasis on life cycles, identifying characteristics and pathology of these parasites.

4125 Laboratory Management and Supervision. (1-0) Lectures and discussions of general principles of management and supervision in clinical laboratory and its personnel.


4261 Medical Technology Research. (Laboratory 3-9 hours) Directed independent research covering principles of research and development of clinical laboratory methodology.

4318 Hematology/Coagulation II. (2-5) In-depth study of theoretical and practical aspects clinical hematology and blood coagulation with emphasis on principles, methodology, problems encountered and clinical applications. Lecture and laboratory.

Prerequisite: Medical Technology 3412.

4324 Immunology and Serology. (3-3) Principles of immune response and underlying immunologic procedures of diagnostic value are discussed. Lectures and laboratory emphasize detection, identification, nature of antigens and antibodies, and the antigen-antibody reactions encountered.

4360 Immunohematology. (2-3) Study of theoretical and practical consideration of major blood groups with emphasis on grouping and typing, antibody detection and identification, compatibility testing and component therapy in blood transfusion service. Lecture and laboratory.
**4380 Advanced Clinical Chemistry.** (2-6) An advanced study of theoretical and practical aspects of clinical chemistry with special emphasis on current trends in clinical application. 
Prerequisite: Medical Technology 4470 or consent of instructor.

**4410 Medical Technology Clinical Practice I.** (0-10) First semester of medical technology training at a School of Medical Technology. Supervising professor will confer with the student and follow student's progress conferring with instructors at the School.

**4411 Medical Technology Clinical Practice II.** (0-10) Second semester of medical technology training at a School of Medical Technology. Supervising professor will confer with the student and follow student's progress conferring with instructors at the School.

**4412 Medical Technology Clinical Practice III.** (0-6) Third semester of medical technology training at a School of Medical Technology. Supervising professor will confer with the student and follow student's progress conferring with instructors at the School.

**4413 Medical Technology Clinical Practice IV.** (0-6) Fourth semester of medical technology training at a School of Medical Technology. Supervising professor will confer with the student and follow student's progress conferring with instructors at the School.

**4470 Clinical Chemistry II.** (3-8) A study of the theoretical and practical aspects of clinical chemistry. Manual and automated laboratory procedures for quantitative analysis of various body fluids.

**4550 Medical Microbiology.** (2-9) Study of pathogenic and non-pathogenic bacteria, fungi and viruses. Special emphasis on methods of isolation from body fluids, cultural and differential biochemical characteristics of body pathogens. Lecture and laboratory.

**4560 Medical Technology Practice I.** (0-24) Structured clinical experience assigned on an individual basis for observation, study and practical application of techniques and methodology clinical laboratory. Discussions, seminars and workshops required.

**4561 Medical Technology Practice II.** (0-20) Continuation of Medical Technology Practice I, emphasis in areas of hematology, serology, blood banking and urinalysis.

**4562 Medical Technology Practice III.** (0-20) Continuation of Medical Technology Practice I emphasis in areas of medical bacteriology, parasitology, mycology and clinical chemistry.

### Courses in Physical Therapy

Students planning to major in physical therapy must contact the Department of Allied Health Sciences for counseling and degree planning prior to enrolling in any physical therapy courses. Acceptance into the University and declaration as a physical therapy major does not imply or guarantee acceptance into the Physical Therapy Program.

**3310 Neuroanatomy.** (2-2) Study of brain and spinal cord with consideration given to clinical significance of anatomical structures. Specimens of human brain and spinal cord provide laboratory material.

**3312 Functional Anatomy.** (2-3) Functional aspects of musculo-skeletal and neuromuscular system, including biomechanics along with analysis of muscle and joint action in activities, gaits, and skills. Abnormal functions due to physical disabilities and disturbances in motor patterns are analyzed and discussed.
3313 Physical Therapy Procedures. (2-3) Physics and physiological effects of light, heat, cold, ultrasound, high frequency electrical currents, and water are presented as they relate to treatment of indicated pathological conditions. Principles of massage and taping for athletic injuries included. Principles and methods of teaching and supervising supportive personnel in relation to these modalities.

3318 Physical Evaluation and Exercise. (2-3) Principles and techniques of mobilization, exercise programs and equipment, and home programs. Evaluation and treatment techniques involved with obstetrics, peripheral vascular and sensory problems, and posture and scoliosis. Exposure to occupational behavior, disability evaluation and upper extremity prosthetics included. Elements of recording, analyzing and communicating results as appropriate are presented.

3330 Communication for Physical Therapy. (3-0) Oral and written communication as related to physical therapy. Assignments include library projects, abstracts, evaluation of current scientific literature and questionnaire design. Elements of experimental design, methods of data collection, statistics and presentations.

3410 Gross Anatomy I. (3-9) Structural and functional aspects of regions of body under study emphasized by means of dissection of human cadaver, lectures and demonstrations. Clinical significance of anatomical structures stressed.

3411 Gross Anatomy II. (3-9) Structural and functional aspects of regions of body under study emphasized by means of dissection of human cadaver, lectures and demonstrations. Clinical significance of anatomical structures stressed.

3415 Clinical Education I. (1-9) Observing and performing, with supervision, techniques learned in class on patients in variety of clinical settings. Major objective is to understand role of physical therapist in many different settings. Health team conferences are attended; responsibility of physical therapy personnel discussed with emphasis on developing and understanding interpersonal relationships in clinical setting. Pharmacotherapeutic agents and their effect on patients are studied. Observation of surgical procedures.

3418 Patient Care and Evaluation. (2-8) General orientation to physical therapy and allied health developments, including ethics and professional/interpersonal relationships. Basic patient care procedures from Nursing Inservice Department and physical therapy faculty. Discussion of patients' and professionals' reactions to disability. Basic evaluation and treatment procedures, with their physical and physiological bases. Observation and practice of skills, with supervision, on patient units (with nursing personnel) and in Physical Therapy Department.

4210 Pathology. (2-1) Selected demonstrations and lectures embracing a consideration of general and special pathology. Combined in study of disease mechanisms involved in inflammation and repair, infection, degenerative processes, disturbances in metabolism, circulatory disturbances, and disorders of growth including tumors. Systems of the body are studied from point of view of histological and functional change.

4213 Electrotherapy. (1-2) Physical aspects, physiological effects, indications and contraindications of electrical currents and their therapeutic value. Basic principles and techniques of electrodiagnostic testing, electromyography, and nerve conduction.

4215 Comprehensive Program Planning. (2-0) Integration of knowledge and skills from previous courses to identify problems, establish goals and develop comprehensive physical therapy programs. Programs related to selected disorders, and planning, of health programs involving physical therapist.

4218 Medical Science. (2-0) Selected lectures and case presentations in medical surgical specialties covering subjects in neurology, dermatology, hema-
tology, cardiopulmonary medicine, otolaryngology, thoracic surgery, radiology, orthopedics, anesthesiology, vascular surgery, neurosurgery, and plastic surgery.

4315  **Physical Therapy Procedures and Evaluation.** (2-3) Neurophysiological approach to therapeutic exercise, evaluation and treatment of patients following cerebrovascular accidents, evaluation and treatment of brain-injured child, neurological evaluation, rehabilitation techniques and management of lower-extremity amputee.

4320  **Psychiatry and Mental Health.** (3-0) General principles of personality development, life stresses, psychodynamics and psychosis. Interpersonal relationships in dealing with grief, pain, and dying. Overview of Texas mental health system and physical therapist's role in various settings.

4323  **Community Health.** (3-0) Current scope, methods, resources, activities and trends in health maintenance and health delivery. Attitudes regarding health needs of people, and programming of service to meet these needs are discussed. Educational preparation and role of selected health workers, and influence of health personnel and program on the community are discussed or demonstrated through seminars and visits to facilities.

4325  **Organization and Administration of a Physical Therapy Service.** Materials on planning, organizing, and managing a physical therapy service in an institution or agency. Personnel, supervision, facility planning, fiscal management, communications, and medical-legal aspects of service programs. Lectures, group problem-solving, and projects are utilized.

4330  **Individual and Group Communication for Physical Therapy.** (3-0) Individual and group communication as related to physical therapy. Interviewing techniques, counseling techniques, teaching/learning methods, audiovisual materials, and group process considered.

4410  **Clinical Education II.** (1-9) Student gains skill in clinical procedures and interactions with patients and professional personnel as he practices, under supervision, techniques learned in classroom. Learns how experienced clinical teaching staff apply, modify, and adapt these skills to each individual patient. Becomes familiar with many aspects of total patient care as presented in acute hospital departments, outpatient services, and through home care and referral programs.

4411  **Clinical Education III.** (1-8) In this program of supervised clinical education experience, student is assigned his own patients, organizes and administers physical therapy, follows patients through much of their total hospital stay, gives home instructions, cooperates in a referral program to insure proper follow-up care, and may make home visits with public health physical therapists. Rotation through services of a teaching hospital and experiences in nearby hospitals and facilities provides a variety of patient-centered experiences.

4710  **Clinical Education IV.** (0-40) Through affiliations with agencies, hospitals, and selected treatment centers, a program of clinical education experience to include a variety of patients, evaluation and treatment techniques, teaching, supervisory and administrative roles is arranged for each physical therapy student. This twelve weeks of full-time summer affiliation follows completion of senior year of academic studies.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
Department of Health Administration

Vernon D. Seifert, Associate Professor and Chairman, effective Spring, 1980
Darwin E. Winfield, Associate Professor and Acting Chairman, Fall, 1979
Professor: Rappaport, Shepard
Associate Professors: Conley, Khouri, Winfield
Assistant Professors: Belchle, Ramon, Stewart
Lecturer: Riebe, Guimarin
Adjunct Faculty: Barho, Blumberg, Clements, Gingrich, Hollander, Mayberry, White
Clinical Faculty: Barbara Barter, RRA; Barbara Bean, RRA; Peggy Berry, RRA; Mary Louise Cantu, RRA; Susie Dibble, RRA; Patricia Garza, RRA; Rose Gee, RRA; Lois Givens, RRA; Barbara Greebon, ART; Barbara Hartigan, ART; Wilma Hill, RRA; Betty Hoermann, RRA; Rosalie Janish, RRA; Dorothy Johnston, RRA; Dolores Kubecka, RRA; Hattle Lindsay, RRA; Carol McCauley, RRA; Margaret Martin, RRA; Susie Mendoza, RRA; Sandy Metzler, RRA; Gloria Navarro, RRA; Rita Ponnas, RRA; Mary Jo Quinn, RRA; Euel Renouf, RRA; Elva Rigg, RRA; Patsy Saunders, RRA; Mary Sidelnik, RRA; Shirley Stevens, ART; Marilyn Stewart, RRA; Ann Thompson, RRA; Barbara Vallance, RRA; Emily Van Neil, ART; Virginia Walters, RRA; Hyla Winters, RRA; Valerie Works, RRA; Gloria Zahnow, ART.

Counseling

Students interested in areas of Health Care Management should contact the following advisers in the Department of Health Administration for counseling:
Health Care Management: Mr. Darwin E. Winfield or Mr. Bernard Rappaport
Medical Record Administration: Mr. Adolph I. Ramon

Bachelor of Science in Health Professions

Major: Health Professions
Specialization: Health Care Management

I. Sixty-five semester hours and an Associate degree (or its equivalent) in an area of allied health.
II. Core Curriculum of 37 semester hours:

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<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>History 1310, 1320</td>
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<tr>
<td>Political Science 2310, 2320</td>
<td>6</td>
</tr>
<tr>
<td>English 1310, 1320</td>
<td>6</td>
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<tr>
<td>English 2351 (or literature)</td>
<td>3</td>
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<tr>
<td>Health Administration 4320, 4321</td>
<td>6</td>
</tr>
<tr>
<td>Electives (to be selected by adviser)</td>
<td>10</td>
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III. Major: Twenty-six semester hours in Health Management

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<tr>
<td>Health Administration 4121</td>
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<td>Health Administration 4324</td>
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<tr>
<td>Health Administration 4327</td>
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Bachelor of Science in Medical Record Administration

Major: Medical Record Administration
128 semester hours

The Medical Record Administration program is a two-year program consisting of the junior and senior years. The following core curriculum should be completed prior to admission to the Medical Record program.

Core Curriculum
Requirements: Hours

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<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>English 1310, 1320, 3 hours (literature)</td>
<td>9</td>
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<tr>
<td>Mathematics 1315, 3 hour elective</td>
<td>6</td>
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<tr>
<td>History 1310, 1320</td>
<td>6</td>
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<tr>
<td>Political Science 2310, 2320</td>
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<tr>
<td>Speech Communication 2320</td>
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<td>Physical Education activity</td>
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<tr>
<td>Computer Information Systems 2320</td>
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<tr>
<td>Biology 2340, 2350, 2440, 3 hour elective</td>
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<tr>
<td>Medical Record Administration 2360</td>
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<tr>
<td>Allied Health Science 1310</td>
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</tr>
<tr>
<td>Electives (Recommended electives include science, management, psychology, business, sociology)</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL—Freshman and Sophomore Years</td>
<td>67</td>
</tr>
</tbody>
</table>

NOTE: Biology 2340, 2350, Human Anatomy and Physiology, and MRA 2360, Medical Terminology, are required before admission to the program can be considered.

Admission to the University does not guarantee admission to the program. Application for admission to the program will be accepted from September through March 1. Criteria for admission:

1. Second semester sophomore standing.
2. Grade of "C," or above, in all required courses.
3. Personal interview with Medical Record Administration Program Admission Committee.

Students will be informed of their status by May 1.

Although admission is not approved before the second half of the sophomore year, it is strongly recommended that students present themselves for counseling as soon as Medical Record Administration has been selected as a

*To be chosen with aid of adviser
major. Course offerings and sequencing are such that counseling is recommend­
ed to avoid scheduling problems.
A grade of "C," or above, is required in each prerequisite medical record
course prior to progression to the next professional course.
Advance Standing in the Medical Record Administration Program will require
a review of the student’s credentials and/or completion of
equivalency/proficiency examinations.

<table>
<thead>
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</table>

HA—Health Administration
MRA—Medical Record Administration
Total — Junior and Senior Years 61 semester hours
During the second semester of the senior year, students are required to take
Internship I and Internship II. These courses require that the students spend a
total of 9-10 weeks in other institutions (hospitals, health centers, etc.) away from
campus. Students must furnish their own transportation and housing. Because of
the time and distances involved, no courses other than those listed above can be
taken in the final semester of the senior year.
After satisfactory completion of the program, the student is awarded a Bach­
elor of Science in Medical Record Administration, and is then eligible to sit for
the American Medical Record Association Registry Examination.
The program is accredited by the American Medical Record Association and
the Committee on Allied Health Education and Accreditation of the American
Medical Association.

Courses in Health Administration

*4121 Problems in Health Administration. (1-0) In-depth study of a singular
problem considered to be of immediate concern to the health care industry.
Special emphasis is placed on problems unique to managers in allied health.

*4221 Problems in Health Administration. (2-0) In-depth study of a narrow
range of topics considered to be of immediate concern to the health care indus­
try. Special emphasis on problems unique to managers in the field of health
administration.

4301 Personnel Management in Health Administration. (3-0) Personnel
management as applicable to the health care field. Personnel planning, staffing,
*Course may be repeated if subject areas studied are different and with Department Chairman approval.
job requirements, job descriptions, sources of labor supply, training and educational programs, salary administration, employee communications, union-management relations.

*4320 Seminar in Health Administration. (3-0) Current trends and problems in health administration which affect health administration technical and professional personnel. Designed to place emphasis in selected areas of administration and management. Research paper and presentation required of each student.

*4321 Problem Solving for Health Care Managers. (3-0) An introduction into how various methodologies can be used to solve health administration problems which affect health administration technical and professional personnel. Designed to place emphasis on basic issues and methods most directly applicable to Administration and Management problems. Exercises in critically reviewing current periodical literature, a research paper and an oral presentation required of each student.

4324 Supervision in Health Service Institutions. (3-0) Duties and problems of hospital supervision. Overall principles of supervising hospital departments or units and practical problems occurring in planning, organizing, directing, and controlling day to day operations of a variety of health service facilities.

4327 Medicolegal Aspects of Health Administration. (3-0) This course includes a review of laws pertaining to the legal responsibilities of the physician, nurse, health care institutions, and the variety of health care workers who contribute to patient care. Also included will be a broad review of legal liability for professional negligence. A portion of the course will be devoted to a clinical study, within the health care institution, of the ethics of medicine as they affect the interpersonal relationship of the physician, patient, the health care worker, and the institution.

4328 Hospital Organization and Management. (3-0) Overview of hospital organization. Analysis of organizational structure of administrative and management elements necessary for policy determination, decision making and management control to achieve institutional goals and objectives. Analysis of direct and indirect patient-care elements and their inter-relationships and responsibilities.

4340 Management of Health Information Systems. (3-0) Provides an introduction to automated information systems which are useful to health care facilities and agencies, and demonstrates the application of information systems and techniques in the health care industry.

4375 Principles of Health Service Finance I. (3-0) Introduction to health service finance with emphasis upon identification of revenue producing activities and elements of health care costs. Fundamentals of health care accounting systems and concepts.

4376 Principles of Health Service Finance II. (3-0) Concentration in the procedures, problems and policies relative to budgetary preparation and control, accounting and business office operations and the involvement of third party financial agencies such as Medicare and health insurance.

Prerequisite: Health Administration 4375.

*4440 Practicum Internship A. (8-0) Students with specialization in management participate in a health service based practicum. Experiences providing opportunities for observation, participation, and practical application of administrative or management skills in the institutional setting are required.

*4441 Tutorials in Health Administration. (8-0) Studies tailored to the particular interests and needs of individual students. A variety of experiences

*Course may be repeated if subject areas studied are different and with Department Chairman approval.
may be used to enrich the program for the student with special needs or demonstrated competencies.

Courses in Medical Record Administration

2360 Medical Terminology. (3-0) Recognizing and understanding the vocabulary of the health care professions. Emphasis on medical prefixes, suffixes and word roots as used in oral and written communications.
Prerequisite: Six semester hours of anatomy and physiology or consent of the department chairman.

3310 Medical Record Directed Experience I. (0-8) Observation by and participation of medical record students in a supervised learning experience within a medical record facility. Application of classroom work to an actual on-the-job-setting.

3360 Principles of Health Care Statistics. (3-0) An introduction to methods and processes of statistical analysis as applied in a health care delivery system. Data collection techniques, interpretation of data and data display in a departmental service environment.

3362 Health Services Communications. (3-0) Application of written and oral communications and coordinating activities required of Medical Record Administrators in their professional relationship with the hospital medical staff and its committees, and other health care agencies and organizations.

3363 Medical Record Science I. (2-2) An introduction to the principles and procedures used in medical record organization, maintenance and retention. Filing systems and procedures, forms design, microfilming, correspondence, work flow and work simplification. Functions and duties of the Medical Record Administrator and relationships of the medical record to the health care system will be emphasized.

3364 Medical Record Science II. (2-2) A study of the approved systems for classification and indexing of diseases and operations; also, a review of techniques and practice in medical transcription.

3365 Medical Record Science III. (2-2) The Medical Record Administrator’s relationships to the health care institution, the medical staff, and related committees. Survey and certification procedures for accrediting and licensing agencies.

3367 Disease and Medical Science I. (3-0) An introduction to the general disease process. Stress is placed upon the occurrence of disease, the signs and symptoms of disease, the test values and findings of disease, and the therapeutic treatment of disease.
Prerequisite: Medical Record Administration 2360 or consent of the department chairman.

3368 Disease and Medical Science II. (3-0) A continuation of Disease and Medical Science I.
Prerequisite: Medical Record Administration 3367, Disease and Medical Science I.

4183 Medical Record Seminar. (2-0) Problem solving course designed to assimilate actual internship encounters and theory. Stress on supervisory skills. Individual projects relating to design and equipping of a medical record department.

4310 Medical Record Directed Experience II. (0-8) Continued supervised experience in medical record procedures. Filing, coding, indexing, qualitative and quantitative record analysis. Student will develop insight and understanding of health care delivery system as related to the medical record.
4382 Survey of Utilization Review and Medical Care Evaluation Studies. (3-0) Overview of regulatory agency requirements for utilization review, governmental and non-governmental. Methods and procedures for peer review. Completion of medical care evaluation studies in acute general hospitals, specialty hospitals and long term care institutions.

4688 Internship I. (6 Weeks Rotating Internship) Affiliation in selected health care facilities to become proficient in technical aspects of organizing and managing a medical record department. Full time participation of the student required.

4689 Internship II. (6 Weeks Rotating Internship) Administration training under the direction of a Registered Record Administrator. Stress on personnel problems, interdepartmental relations and committee assignments. Affiliations will be in long term care facilities, home health agencies, State and Federal agencies, clinic and community health agencies. Full time participation of the student is required.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
School of Liberal Arts

Keith H. Lovin, Ph.D., Dean

Department of English, Religion ........ Martha L. Brunson, Ph.D., Chairman
Department of Geography and Planning ... Richard G. Boehm, Ph.D., Chairman
Department of History ...................... Everette Swinney, Ph.D., Chairman
Department of Modern Languages .......... Charles R. Carlisle, Ph.D., Chairman
Department of Philosophy ................. J. Michael Orenduff, Ph.D., Chairman
Department of Political Science Theodore T. Hindson, Ph.D., Acting Chairman
Department of Sociology-Anthropology ... Rollo K. Newsom, Ph.D., Chairman
Department of English

Martha L. Brunson, Professor and Chairman
Ralph H. Houston, Distinguished Professor of English Emeritus
H. Arlin Turner, Professor of Therese Kayser Lindsey Chair of Literature
Associate Professors: Gravitt, Grayson, Heaberlin, Meathenia, Ogle, Parkin-Speer, Ronan, Rosenbalm, Stedman
Assistant Professors: *J.C. Alexander, Archer, Bartsch, Bonds, Braffett, Chavkin, Deduck, Faber-Irot, Haney, Huffaker, Ingram, Medford, O'Connor, M.S. Olson, Starling, Taylor, Thompson, **Tolbert, Wimsatt
Lecturers: McLamore, B.G. Moore

Requirements for the Major and Minor in English

Ordinarily, English majors are expected to earn the Bachelor of Arts degree. They may, however, be graduated with a major in English under the curriculum leading to the degree of Bachelor of Science in Education if they meet the modern language requirement.

In addition to the minimum required 30 semester hours in English, or the 24 hours required for an English minor, an English major or minor who does not maintain a "B" average in freshman English 1310 and 1320 must take English 3311, Advanced Writing and Reading.

In the selection of advanced courses, English majors and minors are limited to three semester hours from English 3312, 3319, and 4310, and six semester hours from English 3316, 3321, 3323, 3328, 3331, 3335, 3340, 3370, and 4325. This restriction in selection will not apply to any courses offered in excess of the 30 semester hours minimum required for the major or the 24 semester hours minimum required for the minor. Candidates for secondary certification must include English 3387.

Requirements for Elementary Certification with English as the Specialization

For students enrolled under the curriculum for elementary education teachers, plans for using English as an area of academic specialization are described in the section of this catalog dealing with elementary education curriculum.

Bachelor of Arts Degree
(128 semester hours; may be planned to include a certificate)

Notes:
1. Thirty semester hours in English are required for a major. See preceding statement — “Requirements for the Major and Minor in English.”
2. Only six semester hours of sophomore English literature may be taken for credit.

**Faculty Development Leave, 1st and 2nd Summer Terms, 1980.
3. A minor must be completed. Requirements for the minor are listed near the front of the catalog.

4. At least six semester hours of a foreign language must be earned, and a proficiency level of successful completion of the second semester of the sophomore course in that language must be achieved. (For additional information, see the Chairman of the Department of Modern Languages.)

5. For candidates who plan to qualify for a teaching certificate, the minimum number of hours required may vary between 128 and 134, depending on the choice of a second teaching field.

6. Candidates for secondary teaching certificates must complete 18 semester hours of education in the following sequence: Education 3312, 3330, 4331, 4332, and 4681.

### Suggested Course Plan

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Sophomore Year</th>
<th>Junior Year</th>
<th>Senior Year</th>
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<tbody>
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32-34

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<td>Other courses (Philosophy 2330 or electives)</td>
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### Bachelor of Science in Education Degree
(128 semester hours; includes certificate)

**Notes:**

1. Thirty semester hours in English are required. See preceding statement—"Requirements for the Major and Minor in English."

2. Only six semester hours of sophomore English literature may be taken for credit.

3. Courses required to qualify in a second teaching field must be completed.

4. In addition to fulfilling the modern language requirement, either one course in mathematics or two semesters in science is required.

5. At least six semester hours of a foreign language must be earned, and a proficiency level of successful completion of the second semester of the sophomore course in that language must be achieved. (For additional information, see the Chairman of the Department of Modern Languages.)
Suggested Course Plan

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
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Freshman Courses

1300 Basic Reading and Writing. (3-0) A course for students who need to acquire a command of the basic written English vocabulary and structures before attempting to develop extended essays. Students receive instruction in vocabulary development, spelling, mechanics, sentence building, and correct punctuation, as well as practice in writing, revising, and proofreading. This three-hour course may not be substituted for either semester of required freshman English. Required for entering freshmen who fail to make satisfactory scores on placement tests. Recommended for students who have earned below a "C" in English 1310 or below a "C" average in English 1310 and English 1320. This course will not constitute a part of the hours required for a baccalaureate degree.

English 1310 and 1320, in the sequence given, are required of every freshman who has not had their equivalent in an institution of college rank or who has not received credit for them by an advanced standing examination. They are preliminary to any other courses in English.

1310 Reading and Writing. (3-0) A course to improve reading and writing skills; practice in expository writing integrated with the study of grammar, sentence structure, and organization; reading devoted entirely to non-fiction.

1320 Reading and Writing. (3-0) A course to improve reading and writing skills; practice in longer exposition integrated with the study of narration, description, and argument; reading devoted to expository essays and other literature.

*1390 History of Ideas I (GENERAL HONORS course only). (3-0) An honors colloquium centering on selected aspects of classical culture, their contributions to understanding of self and the universe and their relevance to contemporary society.

*May be repeated once with different emphasis for additional credit.
Sophomore Courses

Requirements in sophomore English must be completed before a student takes any advanced work in English.

Note:

Students in degree programs which require six semester hours of literature may take any combination of one course from Group A and one course from Group B, listed below, provided the degree program does not specify a choice: (Group A: English 2310, 2330, 2370; Group B: English 2320, 2340, 2380). Only six semester hours of sophomore level literature may be taken for credit. Also, students who earn a "B," or above, in the first sophomore course may, with permission from the chairman of their major department and School Dean, elect to take an advanced course in lieu of the second sophomore course.

2310, 2320 A Survey of English Literature. Required of English majors and minors. May be elected by all students whose degree plans do not require alternate sophomore English courses.

If an English major or minor has taken any other sophomore sequence, one course (three semester hours) in British literature at the advanced level will be added to the required major or minor hours in English.

2310 Survey of English Literature from Beowulf through the Age of Classicism. (3-0)

2320 Survey of English Literature from the Romantic Period to the Present. (3-0)

2330, 2340 World Literature. A survey of the literature of great civilizations of the past and present. Required of elementary education majors. May be selected by students whose degree plans do not specify other English courses.

2330 A Survey of World Literature before 1600. (3-0)

2340 A Survey of World Literature from 1600 to the Present. (3-0)

2351 Scientific Writing. (3-0) The study of exposition, adapted to the needs of science majors; writing of reports and reading of scientific essays; also satisfies the pre-engineering requirement; does not substitute for a sophomore literature course in any degree plan for teacher certification.

2370, 2380 Masterpieces. These courses may be elected by all students whose degree plans do not require other sophomore English courses.

2370 Masterpieces in English Literature. (3-0) Masterpieces of English literature of various types: poetry, the drama, the novel, and the short story.

2380 Masterpieces in American Literature. (3-0) Masterpieces of American literature of various types: biography, the novel, the drama, the short story, and poetry.

2384 Poetry and Fiction Writing. (3-0) A workshop in imaginative writing. The course acquaints students with practical criticism and contemporary trends, allowing their development of creative skills. This course does not take the place of required sophomore courses.

*2390 History of Ideas II. (GENERAL HONORS course only) (3-0) An honors colloquium which explores the quest for an ideal society and the ideologies which that quest has produced.

* 2391 History of Ideas III. (GENERAL HONORS course only) (3-0) An honors colloquium focusing upon intellectual and cultural developments in western history which have particular significance for contemporary society.

*May be repeated once with different emphasis for additional credit.
Junior-Senior Courses

3310 Composition for Occupational Education Majors. (3-0) Basic writing skills, with intensive practice in the standard patterns of exposition. It may be counted as three semester hours of the six-hour freshman English requirement; it will not substitute for the sophomore literature requirement. Creditable only to occupational education majors and offered off-campus.

3311 Advanced Writing and Reading. (3-0) The nature of the language and the reasons which underlie the elementary rules of spelling, grammar, rhetoric, and stylistics.

3312 An Introduction to Applied Linguistics and Language Study. (3-0) English phonology, morphology, semantics, dialectology, sociolinguistics, normal language acquisition, and/or writing and spelling systems.

3314 Professional Written Communications. (3-0) Application of the rules and practices of effective writing to specific activities such as criminal justice, public administration, and health sciences and administration. Enrollment in each section is limited to one particular discipline. Not creditable in minimum requirements for English major or minor.

3315 Creative Writing. (3-0) A critical seminar for writers of fiction, poetry, and articles. Creativity, criticism, and revision are emphasized.

3316 Comparative Studies in Film and Prose Fiction. (3-0) A comparative study of major novels and the films which have been made from them.

3319 The Development of English. (3-0) Origin and growth of the English language with particular attention to phonological, morphological, and grammatical changes; history of dialects, spelling, and dictionaries; sources of vocabulary.

3320 Literary Criticism. (3-0) A study and application of critical approaches from Aristotle to the present, with emphasis on problems of modern criticism.

3321 The Short Story. (3-0) The short story throughout the world since Poe and Gogol.

3322 The European Novel. (3-0) Major continental novelists from Cervantes to the present, read in translation.

3323 British and American Poetry Since 1900. (3-0) The more significant developments in British and American poetry since 1900.

3327 Types of World Drama in English. (3-0) Examples of world drama from Aeschylus to Ibsen.

3328 Types of World Drama in English (Modern). (3-0) Significant examples of world drama in English from Ibsen to O'Neill, Williams, and Miller.

3329 Mythology and Folklore. (3-0) A different offering each semester; Focus will be on comparative mythology or general folklore.

3331 Literature of Black America. (3-0) Poetry, drama, the short story, and the novel of the people of black America.

3333 Early American Literature. (3-0) Significant American prose and poetry from Anne Bradstreet to Whitman.

3335 Later American Literature. (3-0) The more important trends in American literature since the middle of the nineteenth century, with emphasis upon the rise of realism.

3338 The American Novel. (3-0) A study of the novels and pertinent criticism from the beginnings in America.

3340 Special Topics in Language and Literature. (3-0) A different offering each semester. May be taken as an individual tutorial with permission of the
chairperson of the Department of English and approval of the assigned instructor. May not be repeated for credit.

3352 Medieval English Literature. (3-0) Studies of important non-Chaucerian writings in the Middle Ages, some in modern translations.

3353 Non-Dramatic Literature of the Sixteenth Century. (3-0) Major poets and prose writers from More to Spenser.

3354 Shakespeare. (3-0) Selected plays from the earliest through Hamlet.

3356 Non-Dramatic Literature of the Seventeenth Century. (3-0) Prose and poetry from Donne and Bacon to Milton and Dryden.

3357 English Literature of the Restoration and Augustan Periods, 1660-1750. (3-0) The development of classicism through Pope and Swift.

3359 English Literature, 1750-1800. (3-0) The decline of classicism and the romantic beginning.

3362 The English Romantics. (3-0) English poetry and prose of the Romantic Age.

3365 Significant Victorian Literature. (3-0) Significant developments in Victorian poetry and prose as these apply to the student's cultural background.

3368 The English Novel. (3-0) English prose fiction.

3370 Early Twentieth Century English Literature. (3-0) Dominant literary currents of the time; poetry, drama, and novel.

3385 Children's Literature. (3-0) Traditional and creative literature for children for reading in the elementary grades; a literary history of children's books designed to be of service to the elementary teacher. Creditable for elementary education degree candidates. Not creditable in minimum requirements for the English major or minor.

3386 Adolescent Literature. (3-0) Critical philosophy and working repertoire for the middle school teacher who must meet the needs of students from broadly divergent backgrounds. Creditable as an elective to secondary teaching certificate candidates. Not creditable in minimum requirements for English major or minor.

3387 Reading Materials in the Junior and Senior High School. (3-0) Reading materials suitable for use in the junior and senior high schools, and an introduction to publications of particular value to the high school teacher of English. Creditable only to secondary teaching certificate candidates.

4300 Language Problems in a Multicultural Environment. (3-0) Multicultural and/or multilingual language and linguistics, with special emphasis on descriptive, psychological, social, and semantic aspects. This course will be counted only for elective credit for English majors and English minors.

4310 Modern English Syntax. (3-0) A study of English syntax as described by traditional, structural, and transformational grammarians, with major emphasis on transformational-generative syntax.

The 4000 level courses listed below have a prerequisite of six advanced hours of English. These courses are also offered on the 5000 level with basically the same content. The course may be taken for credit on one level only.

4323 Eminent Lives in Literature. (3-0) Selected works in autobiography and biography.

4325 Reflections of Life in the Lore and Literature of the Southwest. (3-0) The literature of Texas and the surrounding territory; various types of non-fictional prose, fiction, and poetry.

4334 The Concord Writers. (3-0) Emerson, Thoreau, and Hawthorne, with attention to intellectual backgrounds and literary relationships.
4351 Chaucer and His Time. (3-0) The more important works of Chaucer, with an attempt to realize his significance in an important literary and social era.

4355 The Later Shakespeare. (3-0) The problem comedies, through the tragedies, to the serene plays of the final years; emphasis on reading in depth of the plays, significant critical material, and selected plays by Shakespeare's contemporaries.

4358 Milton. (3-0) Milton's longer poems and most important prose writing.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.

Religion

Assistant Professor: D.G. Norris
Instructors: K.W. Brown, C.B. Garner

The University, by arrangements through its Executive Council and by approval of the Board of Regents, gives credit for courses in religion offered by various denominational groups. Both the courses of instruction and the teaching staff must have University approval. A maximum of 12 semester hours may be applied toward a Bachelor's degree.

2310. Survey of the Old Testament. (3-0) A critical, historical, and interpretative study of the literature of Israel, covering the entire Old Testament.

2315 Survey of the New Testament. (3-0) A study of the New Testament, including the historical background, the life of Christ, the spread of Christianity, and the letters of Paul.

2320 The Life and Teachings of Jesus. (3-0) A critical analysis of the four Gospels which provide the only records of the work and words of Jesus.


3360 Comparative Religions. (3-0) An interpretation of the fundamental insights, concepts, ideals, and customs of the major living religions of the world.

Department of Geography and Planning

Richard G. Boehm, Professor and Chairman
Professor: Hellman
Associate Professors: J.D. Harrison, Larsen
Assistant Professor: B.D. Augustin, Visser, Whitley

Requirements for a Major in Geography

Students planning to major in geography may do so as a candidate for the degree of Bachelor of Arts (B.A.), Bachelor of Science (B.S.) (with a major in Physical and Applied Geography), or Bachelor of Science in Education (B.S. in Ed.).

A geography major requires either 30 or 36 semester hours, depending upon which degree is selected. A minor of 18 to 24 semester hours is required (see section of catalog stating requirements for a minor).

Several concentrations are provided within the department for each degree offered and are described in the following pages. It should be remembered that concentrations are suggested programs of study, and are not required. Any student may fulfill his degree requirements by any combination of courses approved by his adviser.

Notes:

1. All geography majors and minors may satisfy their Academic Foundations laboratory science requirement by taking Geography 1414, Physical Geology, and Geography 1415, Historical Geology.
2. Elementary education majors with a specialization in geography may make this substitution for their laboratory science requirement, but must also enroll in General Science 3310 and 3320.
3. Certification is available in Earth Science, and is described in the section of the catalog stating teaching certification requirements.

Bachelor of Arts Degree
(128 semester hours)

The Bachelor of Arts degree is a general degree designed to improve the student's understanding of the world in which he lives. It is also tailored to improve analytical skills necessary to the interpretation of real-world problems in the cultural and physical environment. The degree prepares students for employment in business, government, planning, the foreign service, defense and other types of mapping, industrial location, marketing research, resource evaluation, environmental analysis, transportation, teaching, and other fields.

Notes:

1. Students majoring in geography under the Bachelor of Arts degree program are required to take a minimum of 30 semester hours of course work in the department and a minimum of 18 semester hours in their minor field.
2. Majors in geography may choose from any sequence of courses approved by his advisers or they may choose to take courses according to one of the suggested concentrations listed on the following pages.
3. Students desiring a secondary teaching certificate under the Bachelor of Arts degree program are required to take 30 semester hours in geography, 24 semester hours in their second teaching field, and 18 semester hours of education.

4. Academic Foundations are required for this degree as listed in the section of this catalogue stating the requirements for the Bachelor of Arts degree.

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<th>Hours</th>
<th>Sophomore Year</th>
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<td>Science, Mathematics and/or</td>
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<td>31-36</td>
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Concentration in Cartography-Photogrammetry
Adviser: Dr. A.D. Hellman

Majors are required to take a minimum of 30 semester hours in geography and 18 hours in their minor field. A minimum of six hours of mathematics is required and a minor in mathematics or physics is recommended. Students entering this concentration are to consult with their adviser before registration for courses.

This concentration can also qualify under the Bachelor of Science with a major in Physical and Applied Geography. Please consult with your adviser.

Required Courses:
- Geography 2308, Introduction to Field Mapping and Geodesy.
- Geography 3311, Map Compilation and Graphics
- Geography 3316, Basic Photogrammetry.
- Geography 4312, Aerial Photo-Interpretation and Remote Sensing.
- 18 hours of geography electives

Concentration in Urban and Regional Planning
Advisers: Dr. J.D. Harrison and Dr. R.D. Larsen

Majors are required to take a minimum of 30 semester hours in geography; an 18 hour minor in political science is recommended. Students are urged to consult with their adviser before registering for courses.
Required Courses:
- Geography 3303, Economic Geography.
- Geography 3310, Urban Geography.
- Geography 3311, Map Compilation and Graphics.
- Geography 3313, Natural Resource Use and Planning.
- Geography 3320, City and Regional Planning.
- Geography 4321, Planning Methods and Procedures.
- Geography 4336, Transportation Systems.
- Geography 4338, Land Use Planning.
- Geography 4350, Solid Waste Disposal Planning and Management.

Select any seven of these nine courses in consultation with your adviser, and add to this program nine semester hours of geography electives.

Political Science (minor): 1309 (4307 if upperclassman), 2310, 2320, three hours from either 3314 or 3315, and at least six hours from 3316, 3318, 3320, 3328, 4312, 4335, 4361 or 4380.

Concentration in Resource and Environmental Studies
Adviser: Dr. Richard G. Boehm

Majors are required to complete 30 semester hours in geography and 18 semester hours in their minor field.

This concentration can also be used under the Bachelor of Science degree with a major in Physical and Applied Geography. Please consult with your adviser.

Required Courses:
- Geography 2311, The Physical Environment.
- Geography 3303, Economic Geography.
- Geography 3311, Map Compilation and Graphics.
- Geography 3313, Natural Resource Use and Planning.
- Geography 4313, Environmental Management.
- Geography 4338, Land Use Planning.
- Geography 4350, Solid Waste Disposal Planning and Management.

Select any six of these eight courses in consultation with your adviser and add to this program 12 semester hours of geography electives.

Bachelor of Science Degree with a Major in Physical and Applied Geography (128 semester hours)

This degree is designed to emphasize the physical science elements of geographical study. The degree prepares students for employment in business, government, planning, defense and other types of mapping, applied climatology and meteorology, resource evaluation, environmental analysis and areas where an understanding of the complex relationship between man and his environment is required.

Notes:

1. Students majoring under the Bachelor of Science Degree with a major in Physical and Applied Geography program are required to take 36 semester hours of course work in the department and a minimum of 18 hours in their minor field.
2. A minor must be in biology, chemistry, computer science, mathematics or physics.
3. Majors may select concentrations in Cartography-Photogrammetry or Resource and Environmental Studies. Students may also select 36 semester hours in general geography courses without a concentration. Please consult with the appropriate adviser.
4. If a teaching certificate is desired it will require additional semester hours in their second teaching field and in education.
5. Academic Foundations are required for this degree as listed in the section of this catalog stating the requirements for the Bachelor of Science degree.
6. Astronomy (Physics 1140, 1340) is required of all majors under the Bachelor of Science degree.

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<th>Sophomore Year</th>
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Bachelor of Science in Education Degree with a Geography Major

(128 semester hours: includes certificate)

Notes:

1. Majors are required to take 30 hours in geography and 24 hours in their second teaching field. Students are urged to consult with their advisers before registering for courses. Adviser: Dr. R.G. Boehm.
2. Geography 1310 is recommended.

*Or English 2351 and three hours literature.
## Bachelor of Science in Education with a Social Science Major

(128 semester hours; includes certificate)

Students desiring to take the Social Science Composite Program may elect to have geography as their first field, which will constitute a major of 24 semester hours. History will be the second field with 18 semester hours, political science with 12 semester hours, economics and sociology, three semester hours each. See Department of History for full degree requirements.

### Courses in Geography

1309  **Man's Cultural Environment.** (3-0) The study of the interrelationship of the cultural and physical environment. Emphasis will be placed on the characteristics of world patterns, of human organization and distribution as viewed in contemporary geography.

1310  **World Geography.** (3-0) A course stressing the similarities and differences of the major world regions.

1414  **Physical Geology.** (3-2) The study of the materials making up the earth, the processes that act upon them, and the results of these processes; the development of tools for the interpretation of the earth's history and structure, and the major geologic concepts which make geology unique from other natural sciences.

1415  **Historical Geology.** (3-2) A continuation of physical geology leading to the consideration of the geologic history of the earth (with special emphasis on North America), the evolution of life and the continents through geologic time, and the principles and procedures used in the interpretation of earth history.

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<th>Sophomore Year</th>
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<tr>
<td>Education 3312, 3330</td>
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<td>Education 4331, 4332, 4681</td>
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<td>2-3</td>
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<tr>
<td>Elective</td>
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<td>34-36</td>
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</table>
2308 **Introduction to Field Mapping and Geodesy.** (2-2) An introduction to field mapping, geodesy, and hydrographic surveying. Use of surveying instruments and the practical solutions in field mapping and laboratory compilation.

2311 **The Physical Environment.** (3-0) A systematic study of the various elements that make up the earth’s physical environment, weather, climate, vegetation, soils and landforms.

3303 **Economic Geography.** (3-0) An analysis of world distribution of fundamental occupations and commodities. See Economics 3303.

3305 **Applied Meteorology and Climatology.** (3-0) Introduction to the elements of weather, observation and instrumentation, forecasting, and applications. Use of meteorological equipment and instrumentation. Problem solving in synoptic meteorology and forecasting techniques.

3307 **Geography of Europe.** (3-0) A regional treatment of the continent with emphasis upon the cultural pattern in the various natural regions.

3308 **Latin America.** (3-0) A regional survey of the physical and cultural geography of Latin America.

3309 **United States and Canada.** (3-0) A regional analysis of the United States and Canada with emphasis on population, settlement patterns and economic development.

3310 **Urban Geography.** (3-0) The study of city location, form and development; with emphasis on functional patterns, economic base, service and social area analysis.

3311 **Map Compilation and Graphics.** (2-4) An introduction to map compilation, projections, instrumentation, and graphic techniques in presenting statistical data for planning and geographical analysis.

3313 **Natural Resource Use and Planning.** (3-0) Problems involved in the use and conservation of natural and agricultural resources.

3316 **Basic Photogrammetry.** (1-4) Introduction to aerial photography, photometrics, and instrumentation utilized in aerial mapping.

3320 **City and Regional Planning.** (3-0) History and development of planning in the United States, organizational frameworks for planning (including international comparisons), and an analysis of planning approaches and procedures, particularly within the context of the comprehensive plan.

3321 **Energy Resource Management.** (3-0) An analysis of energy sources, their distribution and characteristics, and the problems associated with their use and management.

3323 **Location Analysis.** (3-0) Location and spatial interaction stressed in terms of the factors considered in locating industry, business, housing and community facilities.

3325 **Geomorphology.** (2-2) The study of land forms, their origins, and practical significance; interpretation of landscapes in the field and from photographs and maps.

3328 **Geography of North Africa and the Middle East.** (3-0) A regional treatment dealing with the physical features and cultural activities of the people in North Africa and the Middle East.

3329 **Geography of Texas.** (3-0) A physical and cultural geography of Texas with special emphasis on human resources and economic activities.

3335 **Oceanography.** (3-0) An introductory course on the physical, chemical, and biological characteristics of the oceans and the topography of ocean basins. Emphasis will be placed on the influence of the seas on the earth’s environment and the economic importance of oceans.
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4312 Aerial Photo-Interpretation and Remote Sensing. (1–4) Basic photometrics and the development of indicator sets in imagery analysis.

4313 Environmental Management. (3–0) An analysis of the major causes of environmental deterioration together with the basic strategies for dealing with these problems.

4321 Planning Methods and Procedures. (3–0) A practical course on the design, analysis, and implementation of planning studies and procedures, with emphasis on methods utilized in planning for housing, community facilities, industry, commerce, and transportation including a discussion of renewal, community development, fund generation, and programming.

4329 Geography of the Soviet Union. (3–0) A regional and topical analysis of the U.S.S.R. including physical and cultural patterns.

4330 Field Methods. (1–4) Methods and techniques for observing, measuring, and recording geographic phenomena. Use of instruments and materials in the collection of data for mapping and field research in the local area.

4335 Directed Research. (3–0) Individual or group research projects at the advanced level that are not offered in the present curriculum. Permission and project approval must be obtained from the departmental chairman prior to registration. This course may be repeated for credit, but a student may not exceed six hours of credit in Directed Research.

4336 Transportation Systems. (3–0) A study of the different transportation systems, their development and meaning at the local and national level.

4338 Land Use Planning. (2–2) A study of the pattern, forms, and characteristics of urban and rural land use at the local and regional level. Field projects in the local area will be required.

4340 Teaching of Geography in Elementary and Secondary Schools. (3–0) Methods and materials for teaching the basic concepts of geography in the elementary and secondary schools with special emphasis on the role of geography in the new social studies curriculum.

4350 Solid Waste Disposal Planning and Management. (3–0) A survey of the methods of solid waste disposal including waste storage, collection, transportation and disposal, and their short and long range effect on the environment. A practical course in the planning, implementation, and management of alternate methods of sanitary waste disposal.

4380 Internship in Government. (3–0) The student will participate in the ongoing work of a selected governmental unit. A research paper dealing with the internship experience written under the direction of a faculty member will be required. This course may be repeated one time for additional internship credit. See Political Science 4380.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
Department of History

*Everette Swinney, Professor and Chairman
**Betty J. Kissler, Professor and Acting Chairman
James Stanley Lemons, Visiting Professor of History
Associate Professors: FitzPatrick, Liddle
Assistant Professors: R. C. Brown, Clayton, Margerison, Watson
Instructors: Amon, Brienza, Huey, Kunkel, Malone, Meloni, Mills, Rubin

Bachelor of Arts Degree
(128 semester hours)

This is a general liberal arts degree designed for students interested in careers in high school or college teaching, government service, museum or library work, journalism, business, etc. A history major requires 30 semester hours, normally 1310, 1320, 2310, 2320, plus 18 hours of advanced courses; the advanced courses must be divided equally between Groups A and B as explained below. This program requires a minor of from 18 to 24 semester hours, depending upon which subject is selected. (See section of catalog stating requirements for a minor.)

Students who desire to take a teaching certificate with this degree may do so by (1) taking a minimum of 18 semester hours of education (3312, 3330, 4331, 4332, and 4681), and (2) taking a second teaching field in place of the minor. (See section of catalog stating requirements for a second teaching field.)

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*Faculty Development Leave, Spring, 1980.
**Acting Chairman, Spring, 1980
Bachelor of Science in Education Degree with a History Major

(128 semester hours; includes certificate)

This degree is designed for students who plan to become history teachers in the secondary schools. It requires 30 hours of history, usually 1310, 1320, 2310, 2320, and 18 hours of advanced courses divided between Groups A and B. A second teaching field is required. (See section of catalog stating requirements for a second teaching field.)

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<td>History, advanced</td>
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<td>Education 4331, 4332, 4681</td>
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<td>Economics, Geography, Sociology or Anthropology</td>
<td>6</td>
<td>Elective</td>
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<td>Philosophy 3201 (or 1305)</td>
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<td>Art, Theatre Arts, or Music 3213 (or 2300)</td>
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Bachelor of Science in Education Degree with Social Science Major

(128 semester hours; includes certificate)

This degree qualifies a student to teach history and the social studies in the secondary public schools. It requires a composite major of 60 semester hours divided among five fields (history, political science, economics, geography, and sociology) as follows: First field, 24 hours; second, 18 hours; third, 12 hours; fourth and fifth, three hours each. The student has a free choice in designating fields, except that (1) history must always be one for the first two fields, and (2) political science must always be one of the first three fields. The sample curriculum below assumes a first field in history, a second in political science, and a third in sociology.
Minors and Second Teaching Fields
Both a minor and a second teaching field in history require 24 semester hours, normally 1310, 1320, 2310, 2320, plus 12 hours of advanced courses divided equally between Groups A and B.

Group A and Group B Courses
Advanced courses in history are divided into two categories. Group A includes courses dealing with the history of Latin America, Europe, and Asia, while Group B courses treat facets of the history of the United States. History majors and minors are required to divide their advanced hours equally between these two groups.

Advanced Standing Examinations
Students who have a composite score of 23 or better on the ACT examination or who have a “B” or better average in 15 hours or more of college work are eligible to take Advanced Standing Examinations in History 1310 and 1320. In addition, talented students may earn credit by examination in 2310, 2320, and other undergraduate history courses. Full details about these examinations may be secured in the office of the Department of History.

Courses in History
lower level courses

1310 History of the United States to 1877. (3-0) A general survey of the history of the United States from its settlement to the end of Reconstruction.

1320 History of the United States, 1877 to Date. (3-0) A general survey of the history of the United States from Reconstruction to the present.

1350 American Civilization, 1492-Date. (3-0) A broad interpretive survey of the history of the United States from the era of discovery to the present.
Note: Students taking History 1350 may not obtain credit for either 1310 or 1320. The six-hour legislative requirement may be absolved in one of two ways: Taking 1310-1320 or taking 1350 plus a Group B advanced course.

2310 Western Civilization, to 1715. (3-0) A general survey of western civilization from earliest times to the end of the 17th century.

2313 History of Disease. (3-0) This course aims to bring the history of infectious disease into the realm of historical explanation by showing how varying patterns of disease circulation have affected human affairs in ancient as well as in modern times.

2320 Western Civilization, 1715 to Date. (3-0) A general survey of western civilization from the Treaty of Utrecht to the present.

Note: History 2310 and 2320 are open to all students regardless of classification; thus, freshmen may take these courses and, at their option, delay American history until the sophomore year. However, it must be understood that History 2310 and 2320 will not satisfy the legislative requirement in American history, and students majoring in fields other than history would be well advised to begin with History 1310 or 1320.

Advanced Courses — Group A

3310 History of Europe, 1871-1919. (3-0) The background, the course, and the results of World War I; emphasis on imperialism, diplomatic alliances, nationalistic rivalries, and the Paris peace settlements.

3311 History of Europe Since 1919. (3-0) The rise of Communism, Fascism, and Nazism; the background of World War II, and the post-war problems of peace.

3312 Renaissance and Reformation. (3-0) The cultural, political, and economic changes that marked the transition from the Middle Ages in Europe to the modern period; special attention to the decline of the medieval church and the protestant revolt.

3314 The Old Regime and the French Revolution. (3-0) A study of European institutions, society, and culture from 1660 to 1815. Special attention will be given to the causes and course of the revolutionary movement in France from 1787 to 1799.

3315 History of England. (3-0) The development of the English nation from pre-historic times to the end of the Tudor Dynasty in 1603.

3316 History of England. (3-0) The English nation and the British Empire from 1603 through the modern era.

3320 History of Mexico. (3-0) A survey of the national period of Mexican history from the independence movement to the present.

3321 History of the ABC Powers of South America. (3-0) A survey of the history of Argentina, Brazil, and Chile from independence to the present.

3322 Colonial History of Latin America to 1828. (3-0) A study of the colonial period of Latin America from the early Spanish and Portuguese colonization to the beginning of the period of independence.

*3325 Selected Topics in Latin American History. (3-0) A study of various subjects or problems in Latin American history. Topics and instructors will vary from semester to semester.

*May be repeated for credit as topics vary with the permission of the department chairman.
3330  The Far East Since 1500. (3-0) A study of the social, cultural, political, and economic development in the Chinese and Japanese civilization. Emphasis is also placed on the problems of Asia in her contacts with the West.

3358  The Military History of the Western World. (3-0) A history of military institutions of the western world, with emphasis on the development of military thought, technology, and application from the earliest period to the present.

4305  Ancient European History. (3-0) A survey of ancient Greek, Hellenistic, and Roman history with emphasis on the continuity of Greek culture.

4307  Medieval European History, 300-1400. (3-0) A study of the Latin West and the Byzantine East during the Middle Ages with emphasis on the continuity of Greco-Roman culture as it encounters Islam and the Barbarians.

4309  Europe from 1815 to 1870. (3-0) A study of the cultural, political, and economic factors that marked the revolutionary rise of nationalism and democracy in the 19th century.

4317  Tudor-Stuart England, 1485-1689. (3-0) A study of the constitutional, social, political, and religious developments in England during the Tudor-Stuart dynasties.

*4318  Interpretations of Modern European History. (3-0) A study of conflicting historical interpretations of several major topics in Modern European history, e.g., Napoleon, Italian Unification, the origins of World War I, Hitler and National Socialism. The topics treated and the instructor will vary from semester to semester.

4333  The History of Russia to 1856. (3-0) A survey of the major political, economic, and cultural events in Kievan Russia, Muscovite Russia, and the Russian Empire to the end of the Crimean War.

4334  The History of Russia Since 1856. (3-0) A survey of the significant developments and personalities in Tsarist and Soviet Russia. Emphasis will be placed on foreign policy, the revolutionary movement, the revolution, and Stalinist Russia.

4336  Germany from 1815 to Present. (3-0) The political, social, economic, and cultural development of Germany since Napoleonic times. Includes the Confederation period, unification under Bismarck, the Second Empire, National Socialism, and the post-war period.

Advanced Courses — Group B

3340  History of the United States, 1877-1914. (3-0) A survey of American history from the end of Reconstruction to the outbreak of World War I with an emphasis on the pertinent historical literature.

3341  History of the United States, 1914-1945. (3-0) The study of American history from World War I through World War II with an emphasis on the pertinent historical literature.

3342  Social and Intellectual History of the United States, 1607-1865. (3-0) A history of American culture, with emphasis on the development of religious, political, social, and philosophical ideas through the Civil War.

3343  Social and Intellectual History of the United States Since 1865. (3-0) A study of the development of the United States after 1865, with emphasis on the social, political, economic, aesthetic, and philosophical ideas that have influenced contemporary American culture.

3344  Economic History of the United States. (3-0) Economic history of the United States from the colonial times to the present. See Economics 3344.

*May be repeated for credit as topics vary with the permission of the department chairman.
3346 **The Civil War and Reconstruction.** (3-0) The history of the United States from the Compromise of 1850 through the election of 1876.

3347 **History of Texas, 1820-1875.** (3-0) This course is designed to stimulate an interest in local history and to give an appreciation of Texas as a cultural unit.

3349 **The Constitution of the United States.** (3-0) An intensive study of the origin and development of the Constitution of the United States.

3350 **The History of Urban America.** (3-0) A survey from colonial times to the present of the rise of American cities and the impact of urbanization on American life and institutions.

3352 **Western America.** (3-0) A general examination of the Trans-Mississippi West, its major cultural, economic, political, and social frontiers, and its development as a region and as a national component, from 1803 to the present.

3353 **The Greater Southwest.** (3-0) A general examination of the region including Texas, California, and the states dominated geographically by the Great Basin, the Southern Rockies, and the Sonarian Desert, from the earliest European contracts to the present.

3354 **History of the South, 1607-1865.** (3-0) A survey of Southern history from the founding of Jamestown to Appomattox, stressing social, political, and economic developments.

3355 **History of the South Since 1865.** (3-0) A survey and interpretation of Southern history from Appomattox to modern times.

3356 **Diplomatic History of the United States to 1898.** (3-0) An intensive study of American diplomacy from the period of the Revolution to the Spanish-American War.

3357 **Diplomatic History of the United States Since 1898.** (3-0) An intensive study of the emergence of the United States as a world power as well as diplomatic developments of the 20th century.

3363 **Early American History to 1763.** (3-0) An intensive study of selected topics in the history of the settlement and expansion of British North America, including the development of the social, economic, and political life of the American colonies.

3367 **History of Texas, 1875-Present.** (3-0) A study of the economic, political, social, and intellectual trends in the history of Texas from the cattle kingdom to the present.

*3369 **Selected Topics in American History.** (3-0) A study of selected topics in American history. Topics treated and instructors will vary from semester to semester.

4359 **History of the United States Since 1945.** (3-0) A survey of American history in recent times, emphasizing historical and related literature.

4364 **Military History of the United States.** (3-0) A specialized study of the military problems of the United States since 1789 and their impact upon non-military problems.

4365 **Early American History: The Revolutionary Period, 1763-1789.** (3-0) A history of the American people during the age of the American Revolution, from the beginning of the crisis with Britain to the adoption of the Constitution.

4367 **The Age of Jackson, 1815-1850.** (3-0) A survey of conflicting American attitudes about the desirability of a strong central government, rapid economic growth, aggressive national expansion, and human slavery in a democratic society.

*May be repeated for credit as topics vary with the permission of the department chairman.
4368  **War and Society.** (3-0) A study of the relationship of war with social and cultural institutions from the 18th century to the present.

4370  **The Negro in American History.** (3-0) A survey of the role of the negro in American history from 1619 to the present. The course will focus on the interaction of the negro face with American culture and institutions.

4372  **The Mexican-American in Texas.** (3-0) A survey of the political, economic, and social-cultural role of the Mexican-American in Texas history from the days of Spanish imperialism to the present.

4388  **Problems in History.** (3-0) This is an independent study course open to advanced students on an individual basis. (May be taken for either Group A or B credit.)

Prerequisite: Approval of the chairman of the department.

4389  **Senior Thesis.** (3-0) A course designed to allow talented history majors to pursue an independent project of research and writing resulting in a scholarly paper which makes a contribution to knowledge. (May be taken for either Group A or Group B credit.)

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.

**General Honors Courses**

*3390  **The Nature of Society.** (GENERAL HONORS course only.) (3-0) An honors colloquium which probes some of the antecedents of modern society as reflected in the philosophy, art, science, and religion of the medieval and early modern era of western Europe.

*3391  **The Nature of Man.** (GENERAL HONORS course only.) (3-0) An honors colloquium exploring some of the philosophical and ethical problems in the realms of modern science, technology, urbanism, social, and cultural change.

*May be repeated once with different emphasis for additional credit.
Department of Modern Languages
(French, German, Spanish)

Charles Richard Carlisle, Associate Professor and Chairman
Professors: *Brister, Galvan, Reeves
Associate Professors: Champion, R.L. Davis, Kremkus, McCoy, Ugalde
Assistant Professors: Fischer, Heudier, Laws
Instructors: Cheselka, De Ruiz, R.C. Perry

Language Requirement

For the Bachelor of Arts degree, successful completion of French, German, or Spanish 2320 is required provided that at least six semester hours are earned. For the Bachelor of Science degree (in science), two courses in French, German, Russian, or Spanish are required. For the Bachelor of Science in Education degree, 12 semester hours total are required with two of the following fields to be represented: science, mathematics, modern language.

Students with recent high school language instruction should take 1420 and 2310 as the first course towards completing the language requirement.

Majors and Minors

Students who major or minor in French, German, or Spanish should distribute advanced course work in the language equally between junior and senior level courses. Majors and minors considering a teaching career should take 3310 and 4340, and are required to complete Linguistics 4307 the semester prior to student teaching. Minors in Linguistics are required to take Linguistics 3340, 4330; English 3312, 4310; Speech Communication 3317; either English 4300 or Spanish 3320; three hours from Special Education 2359, French 3310, German 3310, or Spanish 3310.

Bachelor of Arts Degree
(128 semester hours; may be planned to include a teaching certificate)

Notes:

1. Six advanced courses, including 3310, 4340, and six hours advanced literature, are required for a major in a modern language. The candidate may complete the major with as few as 18 semester hours, if he is qualified to begin at the junior level. However, a major will normally represent 28 to 32 hours of course work (eight to ten courses).
2. An approved minor, usually in another language, must be completed. A language major who elects to minor in a second language must complete four advanced courses in the second language.
3. A candidate seeking a teaching certificate must complete a minimum of 24 hours in each of two teaching fields, Linguistics 4307, and 18 semester hours of education in the following sequence: Education 3312, 3330, 4331, 4332, and 4681.
4. See section of catalog stating requirements for a Bachelor of Arts degree.

*Faculty Development Leave, Spring, 1980.
**Freshman Year** | **Hours** | **Sophomore Year** | **Hours**
--- | --- | --- | ---
Major | 6-8 | Major | 6
Minor | 3 | English (literature) | 6
English 1310, 1320 | 6 | Political Science 2310, 2320 | 6
History 1310, 1320 | 6 | Mathematics and/or Logic | 6
Laboratory science | 6-8 | Minor or electives | 6
Speech Communication 1310 | 3 | Physical Education activity | 2
Physical Education activity | 2 | **32-36**

**Junior Year** | **Hours** | **Senior Year** | **Hours**
--- | --- | --- | ---
Major | 9 | Major | 9
Minor (or electives) | 18 | Minor | 6
Philosophy 3201 (or 1305) | 2-3 | Electives | 15
Art, Theatre Arts, or Music 3213 (or 2300) | 2-3 | **31-33**

**Bachelor of Science in Education Degree**

(128 semester hours; includes teaching certificate)

**Notes:**

1. Requirements for a first teaching field includes 24 semester hours in a modern language, with 18 semester hours of advanced courses to include 3310, 4340, and six hours advanced literature.
2. In addition to the 24 semester hours in language, Linguistics 4307 is required.
3. Students choosing this degree plan must complete 24 semester hours in a second teaching field, and 18 semester hours of required courses in education.

| Freshman Year | Hours | Sophomore Year | Hours | Senior Year | Hours |
--- | --- | --- | --- | --- | ---
First teaching field | 6-8 | First teaching field | 6 | First teaching field | 9
Second teaching field | 6 | Second teaching field | 6 | Second teaching field | 6
English 1310, 1320 | 6 | English (literature) | 6 | Education 4331, 4332, 4681 | 12
History 1310, 1320 | 6 | Speech Communication 1310 | 3 | Linguistics 4307 | 3
Mathematics or Science | 3-8 | Political Science 2310, 2320 | 6 | **30**
Physical Education activity | 2 | Electives | 3 | **27-32**
Courses in French

1410  Beginning French. (4-1) Introduction to listening, speaking, reading and writing skills within a French cultural framework. In the fall semester French 1420 includes an accelerated review of grammatical foundations. Students who begin French 1410 toward Academic Foundations requirements must also complete 1420.

1420  Beginning French. (4-1) Continued practice in listening, speaking, reading and writing skills within a French cultural framework. To satisfy Academic Foundations requirements, a student who takes 1420 as his first college course will need to complete 2310 in order to receive credit for 1420.

2310  Intermediate French. (3-0) Continued development and review of all language skills within a French cultural framework.

2320  Intermediate French. (3-0) More advanced practice in all language skills with greater emphasis on reading within a French cultural framework. Successful completion of 2310 or departmental approval is required to receive credit for 2320.

*3300  Multicultures of America: French. (3-0) A survey course designed to increase the student's awareness of the major ethnic contributions to the development of America with emphasis on Texas and the twentieth century. Taught in English. Credit may not be applied to the major/minor in modern languages.

3301, 3302  Survey of French Literature. (3-0) The first semester will deal with French literature from its beginning through the 18th century; the second from the 19th century to the present.

3304  Advanced Conversation. (3-0) A course designed to strengthen oral and aural command of the language.

3310  French Pronunciation and Intonation. (3-2) Study and intensive practice of problems in French pronunciation and intonation. Two laboratory sessions per week required in addition to class time. Required of majors and minors in French as soon as possible after completion of French 2320 or equivalent.

*3370  French Civilization. (3-0) A survey of the cultural institutions of France designed to provide a background for a better understanding of the French people, encompassing (a) the development of French culture and the forces that have shaped modern France, and (b) contemporary French life and culture. Collateral reading; oral and written reports in French.

4301  The French Novel and Short Story. (3-0) A course designed to acquaint the student with the development of the novel and short story in French literature.

4302  The French Theatre. (3-0) A course designed to acquaint the student with the development of the French theatre.

4340  Advanced Grammar and Composition in French. (3-0) A course designed to strengthen knowledge of the structure of French and written command of the language.

*4390-5390  Studies in French Culture, Language, or Literature. (3-0) A course designed to offer students an opportunity to pursue independent studies in special areas of interest beyond those of other catalog courses. The course is generally available only to graduating seniors who have completed at least two advanced courses or graduate students with special needs. Prerequisite: Approval by the Chairman of the Department of Modern Languages. Applications must be submitted prior to the registration period each semester.

*May be repeated once with different emphasis for additional credit.
Courses in German

1410 Beginning German. (4-1) Introduction to listening, speaking, reading and writing skills within a German cultural framework. In the fall semester German 1420 includes an accelerated review of grammatical foundations. Students who begin German 1410 toward Academic Foundations requirement must also complete 1420.

1420 Beginning German. (4-1) Continued practice in listening, speaking, reading and writing skills within a German cultural framework. To satisfy Academic Foundations requirements, a student who takes 1420 as his first college course will need to complete 2310 in order to receive credit for 1420.

2310 Intermediate German. (3-0) Continued development and review of all language skills within a German cultural framework.

2320 Intermediate German. (3-0) More advanced practice in all language skills with greater emphasis on reading within a German cultural framework. Successful completion of 2310 or departmental approval is required to receive credit for 2320.

*3300 Multicultures of America: German. (3-0) A survey course designed to increase the student's awareness of the major ethnic contributions to the development of America with emphasis on Texas and the twentieth century. Taught in English. Credit may not be applied to the major/minor in modern languages.

3301, 3301 Survey of German Literature. (3-0) The first semester deals with German literature from its beginning through 1750; the second semester from 1750 to the present.

3310 German Phonetics and Advanced Grammar. (3-0) Pronunciation exercises and applied German phonetics. Writing exercises focusing on problem features of German structure. Required of all majors and minors in German as soon as possible after completion of German 2320 or equivalent.

3313 German Thought and Literature in Translation. (3-0) Major topics in German thought, literature, music, and art. Taught in English. This course may not be taken for German credit.

*3370 German Civilization. (3-0) An examination of German culture and life designed to provide a background for a better understanding of Germany and the Germans, encompassing a) a historical survey of the development of German culture, and the forces that shaped modern Germany, and b) a survey of contemporary German life and culture. Collateral readings; oral and written reports in German.

4302 Modern German Novel and Short Story. (3-0) Intensive study of the novel and the short story; works of fiction that serve as exponents of new literary movements, reflect interesting phases of life and thought, or embody tendencies characteristic of certain periods.

4303 Modern German Drama. (3-0) An introduction to and examination of representative works by Major German dramatists embodying lasting concerns and values of interest to contemporary readers.

*4340 Advanced Conversation, Composition, and Stylistics. (3-0) A course designed to strengthen total command of the language. Collateral readings: oral and written reports in German.

*4390-5390 Studies in German Culture, Language, or Literature. (3-0) A course designed to offer students an opportunity to pursue independent studies in special areas of interest beyond those of other catalog courses. The course is

*May be repeated once with different emphasis for additional credit.
generally available only to graduating seniors who have completed at least two advanced courses or graduate students with special needs.

Prerequisite: Approval by the Chairman of the Department of Modern Languages. Applications must be submitted prior to the registration period each semester.

Courses in Russian

*2390 Studies in Russian Culture, Language, and Literature. (4-1) A course designed to offer students an opportunity to pursue independent studies in special areas of interest beyond those of other catalog courses.

Prerequisite: Approval by the Chairman of the Department of Modern Languages. Applications must be submitted prior to the registration period each semester.

Courses in Spanish

1410 Beginning Spanish. (4-1) Introduction to listening, speaking, reading and writing skills within a Spanish cultural framework. In the fall semester Spanish 1420 includes an accelerated review of grammatical foundations. Students who begin Spanish 1410 toward Academic Foundations requirement must also complete 1420.

1420 Beginning Spanish. (4-1) Continued practice in listening, speaking, reading and writing skills within a Spanish cultural framework. To satisfy Academic Foundations requirement, a student who takes 1420 as his first college course will need to complete 2310 in order to receive credit for 1420.

2310 Intermediate Spanish. (3-0) Continued development and review of all language skills within a Spanish framework.

2320 Intermediate Spanish. (3-0) More advanced practice in all language skills with greater emphasis on reading within a Spanish cultural framework. Successful completion of 2310 or departmental approval is required to receive credit for 2320.

Note: Spanish 1410NS, 1420NS, 2310NS, 2320NS. Those sections designated "NS" in the University course schedule are reserved for native speakers of Spanish. Spanish-speaking students with some high school instruction in the language should take 1420, 2310, or 2320 as the first course, depending upon previous language experience.

*3300 Multicultures of America: Spanish. (3-0) A survey course designed to increase the student's awareness of the major ethnic contributions to the development of America with emphasis on Texas and the twentieth century. Taught in English. Credit may not be applied to the major/minor in modern languages.

3301, 3302 Survey of Spanish Literature. (3-0) The first semester deals with Spanish literature from its beginning through the 18th century. The second semester deals with Spanish literature from the 19th century to the present; emphasis on the works and authors that are the more adequate expressions of the thought and culture patterns of their times and that have projected their influence into subsequent periods.

3304 Advanced Conversation. (3-0) A course designed to strengthen conversational command of the language. Open only to non-native speakers of Spanish and native speakers seeking teacher preparation.

3305 Survey of Spanish-American Literature. (3-0) A study of Spanish-American literature from the colonial period to 1880 and its antecedents in Spain.

*May be repeated once with different emphasis for additional credit.
3306  Survey of Spanish-American Literature. (3-0) A study of Spanish-American literature from 1880 to the present and its antecedents in Spain.

3308  Short Stories and Advanced Composition. (3-0) A course designed to improve reading and writing skills in Spanish through extensive and intensive reading of Spanish and Spanish American fiction.

3310  Spanish Phonetics and Phonemics. (3-0) Articulatory phonetics and sound discrimination and production; phonemic and allophonic variants; geographical and social distribution. Required of all majors and minors in Spanish as soon as possible after completion of Spanish 2320 or equivalent.

3320  The Spanish Dialects of Texas. (3-0) A comparative study of the universal Spanish dialects and those of Texas designed to provide the non-native speakers of Spanish with the groundwork that will help them to communicate with the Spanish speaking Mexican Americans of Texas and to help the latter to equate his regional vocabulary with standard forms.

3370  Spanish Civilization. (3-0) A survey of the cultural institutions of Spain designated to provide a background for a better understanding of the Spanish people. Collateral readings; oral and written reports in Spanish.

3371  Spanish-American Civilization. (3-0) Lectures and extensive readings of the cultural institutions of the peoples of Spanish-America and the Mexican-Americans of the United States geared to provide a background for a better understanding of both groups and their literature.

4302  The Spanish Novel. (3-0) A study of the outstanding novels of Spain with emphasis on the 19th and 20th centuries.

4306  Mexican-American Culture. (3-0) A study of the works of Mexican-American writers, poets, musicians, and plastic artists; an analysis of the cultural values embodied in these works.

4330  The Spanish-American Novel. (3-0) The most representative novels in the literary history of Spanish-America.

4340  Advanced Spanish Grammar and Stylistics. (3-0) Major emphasis is placed on syntax, usage and grammatical nomenclature. Attention is also focused on technical neologisms.

*4360A, B  Hispanic Poetry and Drama. (3-0) Masterpieces of Hispanic poetry and drama: A., Selected studies in Spanish and Latin American poetry, and B., Selected studies in Spanish and Latin American drama.

*4390-5390  Studies in Spanish Culture, Language, or Literature. (3-0) A course designed to offer students an opportunity to pursue independent studies in special areas of interest beyond those of other catalog courses. The course is generally available only to graduating seniors who have completed at least two advanced courses or graduate students with special needs.

Prerequisites: Approval by the Chairman of the Department of Modern Languages. Applications must be submitted prior to the registration period each semester.

Courses in Applied Linguistics and Language Learning

3340  Phonology. (3-0) An introduction to the principles of Phonology and their use in language analysis. Includes articulatory/acoustic distinctive features, phonemics, and generative phonology. Practicum.

*May be repeated once with different emphasis for additional credit.
*4301  Structures of Italian. (3-0) A comparison of phonological, morphological, and syntactical structures of Italian with other modern languages, including pronunciation and intonation, as well as lexical differences.
Prerequisite: 2320 proficiency in a second language, or departmental permission.

*4302  Structures of Italian. (3-0) A continuation of the comparison of phonological, morphological and syntactical structures of Italian with other modern languages, including pronunciation and intonation as well as lexical differences.
Prerequisite: 2320 proficiency in a second language, or departmental permission.

*4303  Structures of Portuguese. (3-0) A comparison of phonological, morphological, and syntactical structures of Portuguese with other modern languages, including pronunciation and intonation as well as lexical differences.
Prerequisite: 2320 proficiency in a second language, or departmental approval.

*4304  Structures of Portuguese. (3-0) A continuation of the comparison of phonological, morphological and syntactical structures of Portuguese with other modern languages, including pronunciation and intonation as well as lexical differences.
Prerequisite: 2320 proficiency in a second language, or departmental approval.

4307  Teaching Foreign Languages. (3-0) Fundamentals of foreign language teaching methodology; an introduction to the nature of language learning, language teaching theories, and their application to actual classroom techniques. This course is required of all modern language majors and minors seeking secondary certification.

4320  Teaching English to Speakers of Other Languages. (3-0) An introduction to sociolinguistic backgrounds affecting the acquisition of English as a second language by the bi-lingual bi-cultural child. The identification and practice of teaching strategies by means of films, readings, discussions, and classroom demonstrations.

4330  The Psychology of Language. (3-0) A study of language production and comprehension, with emphasis on language acquisition, bilingual, and verbal behavior.

**4390-5390  Individual Studies in Applied Linguistics and Language Learning. (3-0) This course is generally only open to graduating seniors or graduate students with special needs. Students select a topic in line with their special interests and requirements.
Prerequisites: Formal application for the course in the semester before it is to be taken; and approval by the Chairman of the Department of Modern Languages.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
Department of Philosophy

J. M. Orenduff, Associate Professor and Chairman
Professor: *Joy
Associate Professors: Fulmer, Geuras, Lovin
Assistant Professors: Gordon, Hutcheson, Luizzi, Treanor

Bachelor of Arts Degree
(128 Semester Hours)

Notes:
1. A major in philosophy requires 30 semester hours, including 18 semester hours of advanced courses.
2. All philosophy majors are required to take Philosophy 2311, 2312, and 2330.
3. A minor in philosophy requires 18 semester hours, including 12 semester hours of advanced courses. There are no required courses for the philosophy minor.
4. Philosophy majors and minors may elect to substitute Philosophy 2311 or 2312 for Philosophy 3201 (or 1305).
5. Philosophy is not a field in which teacher certification is granted.

Suggested Degree Plan

<table>
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<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
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Courses in Philosophy

1305 General Philosophy. (3-0) An alternate to Philosophy 3201 and a suggested first course for students wanting an acquaintance with philosophy. A study of universal philosophical problems and their solutions with a view toward developing clear thinking about knowledge, belief, and value. Credit cannot be given for both 1305 and 3201.

*Faculty Development Leave, 1980.
2311 History of Philosophy before 1600. (3-0) Early Greek, Roman, and medieval systems of thought.

2312 History of Philosophy since 1600. (3-0) Modern philosophical thought through the nineteenth century.

2330 Elementary Logic. (3-0) A study of the nature and forms of correct reasoning, both deductive and inductive.

3201 Philosophies Men Live By. (2-0) The great philosophical concepts which through the years have challenged the best thoughts of men and have contributed to the fulfillment of the good life. Emphasis upon the applicability of those concepts to human life in our times and to the development of intellectual perspective. Credit cannot be given for both 3201 and 1305.

3315 Contemporary Philosophy. (3-0) Selected readings in late nineteenth century and twentieth century philosophy: existentialism, positivism, also analytic philosophy, phenomenology, and pragmatism.

Prerequisite: Three hours of lower division philosophy, Philosophy 3201, or consent of the instructor.

3318 Philosophy of Religion. (3-0) An analysis of the concept of God, terms predicated of God, and theological propositions. An attempt to determine the nature of religious utterances in comparison with those of everyday life, scientific discovery, morality, and imaginative expression.

Prerequisite: Three hours of lower division philosophy, Philosophy 3201, or consent of the instructor.

3320 Ethics. (3-0) A study of classical and contemporary philosophical inquiries into man's knowledge of the "good," and the grounds of moral obligation.

Prerequisite: Three hours of lower division philosophy, Philosophy 3201, or consent of the instructor.

3331 Philosophy of Law. (3-0) The major theses which have been set forth in the history of jurisprudence; foundations of law; natural law; legal positivism; the judicial process, etc.

3340 Symbolic Logic. (3-0) A study of the logic of propositions through propositional calculi, formal proofs, and first-order functional calculi. Also included is an investigation into the axiomatic method as used in logic and mathematics, including the concepts of completeness and consistency.

Prerequisite: Philosophy 2330, or Mathematics 2372, or consent of instructor.

* 3350A, B, C Philosophy in Its Relation to Other Disciplines. (3-0) The course will be offered under the following sub-titles: A., Philosophy and the Social Sciences, B., Philosophy and Literature, and C., Philosophy and Professional Ethics. When the course is offered, one of these sub-topics will be discussed. The course is intended to explain the relation between philosophy and the other disciplines to which the sub-titles refer.

Prerequisite: Three semester hours of lower division philosophy, Philosophy 3201, or consent of the instructor.

4350 Philosophy of the Arts. (3-0) A critical and historical analysis of the nature of aesthetic experience and creative genius.

Prerequisite: Three hours of lower division philosophy, Philosophy 3201, or consent of the instructor.

* 4360A, B, C Philosophy Theory. (3-0) A. Philosophical Theory of Science. A study of the major theories concerning the nature and value of science and the scientific method. Topics will include induction, confirmation, the role of mathe-
matics in science, law and theory, explanation, causation, the relation between
natural and social sciences, and the relation between science and values. **B. Philosophical Theory of Knowledge.** A study of the major theories concerning
knowledge, belief, certainty, and perception. Topics covered will include empiricism, rationalism, realism, and idealism. **C. Philosophical Theory of Argumentation.** A study of various methods and types of argumentation used in philosophy as well as in other areas. Topics covered will include a comparison of the language of argument vis-a-vis other linguistic endeavors, the distinction between argument and persuasion, and a specific analysis of argument forms such as reductio ad absurdum, paradigm case, transcendental arguments, logical analogy, etc.

**4370 Metaphysics.** (3-0) Systematic study of metaphysical problems by examination of classical and modern texts. Topics considered will involve being and unity, mind and matter, God, causation and necessity, free will and determination.

Prerequisite: Three hours of lower division philosophy, Philosophy 3201, or consent of the instructor.

**4388 Problems in Philosophy.** (3-0) Independent study of specific problems in philosophy. Open to students on an individual or small group basis by arrangement with the Department of Philosophy. Problem area, bibliography, and study paper outline are to be approved by the instructor.

Prerequisite: Three hours of lower division philosophy, Philosophy 3201, or consent of the instructor.

**4390 Honors Thesis.** (GENERAL HONORS course only) (3-0) A course designed to allow students in General honors to pursue an independent project of research, study, or creative achievement, culminating in a paper, laboratory problem, field research problem, or creative effort of some size and scope.

**May be repeated once for additional credit.**
Department of Political Science

Theodore T. Hindson, Assistant Professor and Acting Chairman
Professors: Bland, R.B. Henderson, Rich
Associate Professors: Farlow, Hardin, Leder, Stouffer, Sullivan, Weinberger, T.J. Williams
Assistant Professors: Balanoff, Convis, Dutton, Gorman, Macdonald, Murphy, Rice, Shields, Spalding, Watson
Instructors: Coleman, Dorrycott, Peary, Whitely
Lecturers: Brittain, T.E. Garner, B.F. McDonald, Jr., McRaven

Bachelor of Arts Degree

(128 semester hours)

Notes:

1. The political science major requires 30 semester hours; the minor, 18 hours.
2. All political science majors are required to take Political Science 1309, which is prerequisite to all advanced courses in political science.
3. All political science majors are required to take at least one course in each of these social science areas: economics, geography, and sociology or anthropology.
4. At least one advanced political science course must be taken in four of the following groups: Group I, American Government and Politics; Group II, Political Theory and Methodology; Group III, Public Law and Public Administration; Group IV, International Relations; Group V, Comparative Government.
5. A teaching certificate is available with this degree plan, but the second teaching field (minor) requirement is increased to 24 hours. The certificate also requires the 18 hours of education.
6. See section of catalog stating requirements for a Bachelor of Arts degree. Students who plan to attend Graduate School are encouraged to take as many as nine semester hours of mathematics and Political Science 3387 and 4307.

Suggested Degree Plan

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<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
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<td>Mathematics</td>
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### Bachelor of Science in Education Degree  
(128 semester hours; includes certificate)

**Notes:**

1. The political science major requires 30 hours; a second teaching field must be completed (24 hours).
2. All political science majors are required to take Political Science 1309, which is a prerequisite for all advanced courses in political science.
3. All political science majors are required to take at least one course in each of the following areas: economics, geography, and sociology or anthropology.
4. At least one advanced political science course must be taken in four of the following groups: Group I, American Government and Politics; Group II, Political Theory and Methodology; Group III, Public Law and Public Administration; Group IV, International Relations; Group V, Comparative Government.

#### Suggested Degree Plan

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<th><strong>Freshman Year</strong></th>
<th><strong>Sophomore Year</strong></th>
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<tr>
<td><strong>Political Science 1309 (or 2330)</strong></td>
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Concentration in Government Administration and Planning

For those students who desire to prepare themselves for mid-entry administrative or planning positions in local, regional, or state government, the following concentration of study, which incorporates practical experience in the form of an internship with some unit of government, is suggested.

Students pursuing this concentration will major in political science and minor in geography.

Courses required for Government Administration and Planning Concentration are:
- Political Science 1309, 2310, 2320, 3314 or 3319A or B, 3316, 3318, 3320 or 4312, 3328, 3387, 4361, 4380.
- Geography: 2311, 3310 or 3323, 3320, 4321, six hours from 3313, 4330, 4335, 4336, 4338, 4350, 4360.
- Sociology: Three semester hours.
- Economics: Three semester hours.

Lawyer's Assistant Program

For those baccalaureate graduates who desire to prepare for careers as a paralegal or lawyer's assistant, an 18 semester hour post-baccalaureate certification program is offered. These courses are also offered as graduate-level courses for graduate students whose graduate adviser has requested inclusion of a Lawyer's Assistant Program course, or courses, in the student's outline of study. See Graduate Bulletin.

Concentration in Legal Studies

This program is for pre-law students and others interested in a legal or paralegal career: Legal assistants, legal secretaries, court stenographers, court clerks, legal reporters and journalists. And finally, those American government students who would be interested in approaching this topic by an examination of the legal system in the United States and in other countries.

Students pursuing this concentration will major in political science and minor in the field of their choice; however, such fields as philosophy, speech communication, sociology, business administration, and English are strongly suggested.

Courses required for Concentration in Legal Studies are:
- Political Science 1309 (or 2330), 2310, 2320, 3310, 3311 (or 3312), 3329, 4311, 4344 (or 4340 or 4347), 4352a, and 4361.
- English 2330, 2340, 3314
- Geography 1309
- Philosophy 2330, 3320, 3331
- Speech Communication 4331
- Sociology 2310, 3343
- Economics, three semester hours

Lower Level Courses

1309 Introduction to Political Science. (3-0) A survey of political science, its development as an academic field, areas of study, methods of inquiry, and applications to levels of political activity. May not be substituted for 2310 or 2320. Required of majors and minors, unless substitute credit is earned in 2330; may be taken by non-majors. Prerequisite to advanced courses in political science for political science majors, except transfer students who take 2330.

Course limited to freshman and sophomore students. Junior and seniors enroll in Political Science 4307.
2310  *Principles of American Government.* (3-0) A survey of the principles of political science, of the American system of government, and of the origins and development of the constitutions of the United States and Texas. Satisfies the legislative requirements for teacher certification.

2320  *Functions of American Government.* (3-0) A study of functions performed in the American system of government, both national and state, with special reference to Texas.

Prerequisite: Political Science 2310 or equivalent.

2330  *Foundations of Political Inquiry.* (3-0) A survey of the discipline and its methods of inquiry with special attention to the major concepts utilized in contemporary political science. Designed for transfer students who have sixty or more credit hours, the course substitutes for 1309. Prerequisite to all advanced courses in Political Science for majors, except students who have credit for 1309.

**Group I — American Government**

3307  *Parties and Party Politics.* (3-0) The American political system, including its history and organization, suffrage, nominations and elections, campaigns, and the related areas of public opinion and pressure group activities.

3308  *The Legislative Process.* (3-0) The dynamics of lawmaking and legislative politics in the United States. The structure, party organization, rules of procedure, and actual operation of the Congress and of selected state legislatures (including Texas) are analyzed, compared, and evaluated.

3309  *The American Presidency.* (3-0) A comprehensive examination of both the presidency and the men who have held it.

3314  *State and Local Government.* (3-0) A study of the organization, functions and powers of state, county and municipal government in the United States with particular reference to patterns of such governments in Texas.

4333A, B  *The Politics of Ethnic Majorities and Minorities in the United States.* (3-0) A. The Mexican-American An analysis of the role of the Mexican-American in American politics, with special attention to the Southwest. The political behavior patterns of Mexican-Americans will be particularly noted. Alternative theories of minority group political activities will be tested, using Chicanos as the sample population. B. The Afro-American A description and analysis of the political consequences of the emergence of an Afro-American identity in the urban centers of America. The civil rights revolution of the 1960s and attempts to explain differences between race relations in the United States and in other countries will be critically examined.

**Group II — Political Theory and Methodology**

3329  *The History of Political Thought.* (3-0) A study of the masters of classical and medieval political theory from Plato to Machiavelli.

3330  *Recent Political Theory.* (3-0) The development of modern political ideas; the meaning and relationships of the significant ideologies of our time; democracy, capitalism, the welfare state, socialism, fascism, and totalitarian communism.

3331  *American Political Theory.* (3-0) The development of American political ideas from the colonial period to the present.

3387  *Statistics for the Behavioral Sciences.* (3-0) The application of elementary descriptive statistics, statistical inference, and correlation and regression to sociological and other behavioral science data with an emphasis on the relationship of theory and method in the research setting. See Psychology 3387.
4307 Method of Political Inquiry. (3-0) Consideration of the nature of political inquiry and examination of assumptions and implications of various modes of political investigation. Designed primarily for students contemplating graduate work in political science or public administration, the course entails criticism of various approaches to the study of politics as well as introduction to techniques for collecting and analyzing data in relation to the total process of research in the Behavioral Sciences.

4335 Politics and Personality. (3-0) An introduction to the relationship between political behavior and human motivation. Topics include psychological perspectives and political theory including some of the works of Sigmund Freud and Erich Fromm; personality and political orientation; the political personality; biological and ethnological perspectives, and the psychological insights offered by fiction.

**Group III — Public Law and Public Administration**

3310 Constitutional Law I. (3-0) A casebook approach to an evaluation of the governmental structure and relationships contained in the United States Constitution. (May be used to satisfy Group I requirements.)

3311 Constitutional Law II. (3-0) An examination of that area of Constitutional interpretation commonly known as Civil Liberties or the relations between the individual and the government. (May be used to satisfy Group I requirements.)

3312 Constitutional Law III. (3-0) A thorough and rigorous analysis of the development of Civil Rights in the United States including Congressional statutes, constitutional amendments, and decisions of the Supreme Court. (May be used to satisfy Group I requirements.)

3316 Introduction to Public Administration. (3-0) The organization and management of the machinery for executing public policies, with particular emphasis upon the Federal bureaucracy.

3318 Public Personnel Administration. (3-0) A study of public personnel systems in the United States with major concentrations on the national civil service system. Special emphasis is given to current research in the areas of leadership, informal organization, motivation and small group theory.

3320 Comparative Public Administration. (3-0) A survey of the field of Public Administration that will emphasize those aspects of administration that are common to all administrative systems. (May be used to satisfy Group V requirements.)

3328 Public Finance Administration. (3-0) Governmental fiscal policy, administrative organization for fiscal administration in governmental units; debt administration; financial reporting; basic elements of administrative systems; benefit-cost analysis, taxation and intergovernmental fiscal relations.

4311 The Judicial Process. (3-0) An intensive examination of the judiciary, focusing upon the politics of judicial selection and the decision-making process of the judiciary as well as the position of the judiciary in the entire political process.

Prerequisite: Political Science 3310 or 3311, or equivalent.

4312 The Administrative Process. (3-0) Intensive analysis of theories and processes of both policy formation and policy enforcement in the American administrative system, emphasizing the regulatory function.

4361 Administrative Law. (3-0) Course stresses the legal principles and practical doctrines involved in the work of administrative tribunals vested with
quasi-legislative or quasi-judicial powers or both. Primary focus on development, practice, and procedures of federal administrative agencies.

**Group IV — International Relations**

**3323 Introduction to International Studies.** (3-0) Required of all majors and minors in International Studies. This "core seminar" identifies critical interdisciplinary questions which will be examined in all courses in the International Studies Program.

**4326 Issues in World Politics.** (3-0) This course is designed to acquaint the student with major issues in world politics and major concepts in international relations.

**4327 Theories of International Politics.** (3-0) This course focuses on theories and concepts in the study of international relations. Major theoretical works and illustrative case studies will be critically examined.

**4345 American Foreign Policy.** (3-0) This course focuses on how foreign policy is made. The major institutions involved in the decision-making process as well as the ideological setting in which they function are examined. Topics studied include the foreign policy roles of Congress, Interest Groups, the State Department and the Secretary of State, the Military Establishment, the Intelligence Community, the Presidency, and Public Opinion. Specific foreign policy decisions will be examined to illustrate the various roles of these institutions in the decision-making process.

**4347 International Law and Organization.** (3-0) Development of the historical background, nature, and scope of international law, and detailed examination of the United Nations and selected regional and specialized organizations. (May be used to satisfy Group III requirements.)

**4358 United States-Latin American Relations.** (3-0) Examination of general policies, problems, and attitudes, together with detailed analysis of United States relations with selected countries.

**Group V — Comparative Government**

**4338 Government and Politics of Latin America.** (3-0) A comparative analysis of political systems in Latin America, examining the impact of socio-cultural and economic factors on political attitudes and behaviors. Special emphasis on Mexico, Cuba, and Brazil.

**4340 Government and Politics of Western Europe.** (3-0) An in-depth analysis of the political systems of the countries of Western Europe with special emphasis on Great Britain, France, Italy and West Germany.

**4341 Government and Politics of the Soviet Union.** (3-0) A comprehensive study of the domestic and foreign policy of the Soviet Union, examined both historically and analytically.

**4342 Government and Politics of Eastern Europe.** (3-0) An historical and comparative examination of the states of Eastern Europe, emphasizing the changing nature of those states as well as their political and economic systems.

**4344A,B,C Middle East Politics.** (3-0) A. Islamic Law and Politics. This course is a study of the law, origins, development divisions, and politics of Islam. Special emphasis will be given to law, political thought, history, and the culture of the Middle East. Topics covered include Muslim law and political institutions, the Arab and Persian roles in Islam; the Islamic Community as a political system; major points of the Islamic faith and their political significance and the political and historical significance of Muslim mysticism. (Note: This course may be used
to satisfy either Group II, Political Theory and Methodology or Group V, Comparative Government requirements for political science majors.) B. Revolution and Nationalism. The focus of this course is revolution and nationalism in the modern Middle East with a special emphasis on the Persian, Egyptian, and Turkish experiences. These three cases are studied in the light of general theoretical literature on revolution and nationalism. Additional attention is given to political developments after the revolutionary periods in each case in relation to theoretical literature on “traditional,” “modernizing autocracy,” “mobilization,” and “conventional” political systems. C. The Arab-Israeli Conflict—A study of the origins, development, and ramifications of the conflict between Israel and its opponents—the Palestinians and the Arab states of the Middle East. Special emphasis on the history and development of Zionism and Palestinian nationalism. Additional topics covered include: American and Soviet relations with Israel, the Arab states, and the Palestinians; the role of “diaspora Jews,” and the Jewish and Muslim or religious dimensions of the conflict.

4350 Government and Politics of Asia. (3-0) A critical analysis of political development in the nations of Far East and South Asia, concentrating on China, Japan and India.

4351 Communism, Socialism and Nation-Building in Africa. (3-0) A comprehensive examination of contemporary political events in Africa with special attention to Angola, South Africa, and Nigeria.

4352A,B,C Topics in Comparative Politics. (3-0) A. International Communism. A study of the development of communist theory and practice from the Communist Manifesto of 1848 to the present with particular emphasis on the development of communism since World War II. B. Political Violence. An analysis of political violence in comparative perspective. Topics covered include military intervention, political assassinations, guerrilla warfare, terrorism, and violent protest. C. Comparative Urban Policies. Cities of the world have common problems. Does the United States have anything to learn from the way other governments deal with crime, urban sprawl, ethnic and racial tension, health, and other urban policy areas? This course explores the possibility that we can learn from the experience of other urban nations.

General Courses

The following courses may be used to satisfy a requirement in any of the preceding Groups if specified on the degree outline.

**4379 Independent Study. (3-0) Independent reading and/or research on various problem areas of political science. Specific problem area, bibliography, and study paper outline will be approved by instructor.

4380 Internship in Government. (3-0) The student will participate in the ongoing work of a selected governmental unit. A research paper dealing with the internship experience written under the direction of a faculty member will be required. This course may be repeated one time for additional internship credit. See Geography 4380.

4680 Internship in Government. (6-0) The student will participate full time (40 hours per week) in the ongoing work of selected governmental units. A research paper dealing with the internship experience written under the direction of a faculty member will be required.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.

*This course may be used to satisfy either Group IV or Group V requirements.

**May be repeated once with different subject matter and instructor. No more than six semester hours credit in meeting degree requirements.
Bachelor of Arts Degree in International Studies  
(128 semester hours)  
Associate Professor Leder, Adviser

Notes:
1. This is an inter-departmental degree program specifying concentrations of study rather than conventional majors and minors.
2. The International Relations Concentration shall consist of 30 semester hours (21 advanced) as specified in curriculum outline.
3. The Area Studies Concentration shall consist of 24 semester hours oriented toward one of the world's regions as specified in curriculum outline.
4. The foreign language requirement consists of a proficiency level equal to the first advanced course in conversation and grammar, provided that at least nine semester hours have been earned. The language offered shall be consistent with the geographical area to be studied.
5. The choice of courses for the Area Studies Concentration shall be made under the direction of the faculty adviser from among those courses accredited for the program.

Suggested Degree Program

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<th>Hours</th>
<th>Sophomore Year</th>
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<tr>
<td>History 1310, 1320</td>
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<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 1309 (or 2330)</td>
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<td>32-34</td>
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Junior Year

<table>
<thead>
<tr>
<th>Hours</th>
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<tbody>
<tr>
<td>Philosophy 3201 (or 1305)</td>
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<tr>
<td>Modern Language</td>
</tr>
<tr>
<td>Area Study Concentration</td>
</tr>
<tr>
<td>International Relations Concentration</td>
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<tr>
<td>Electives</td>
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Senior Year

<table>
<thead>
<tr>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Art, Theatre Arts, or Music</td>
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<td>3213 (or 2300)</td>
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<tr>
<td>Area Study Concentration</td>
</tr>
<tr>
<td>International Relations Concentration</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td>Modern Language, advanced</td>
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</tbody>
</table>
International Relations Concentration
Political Science 1309 or 2330, 3323, 4345, 4347, plus three hours.
History 2310, 2320, 3356, 3357.
Economics/Geography 3303 or Economics 3317 or Economics 3322.

Area Studies Concentration
Language: Nine hours minimum (including first advanced grammar and conversation course).
Political Science 4379 or 4380.
Inter-American Area (select 12 semester hours):
- Political Science 3320, 4338, 4358
- History 3320, 3321
- Economics 3322
- Sociology 4305, 4330, 4345
- Anthropology 3312 or 3314
- Geography 3304, 3309, 4304
- Spanish 3305, 3306, 3371, 4390
- Music 3314

European Area (select 12 semester hours):
- Political Science 3320, 3330, 4340, 4341, 4342
- History 3311, 3316, 4318, 4336
- Economics 3353, 4330
- Geography 3307
- French 3370
- German 3370

Middle East-African Studies (select 12 semester hours):
- Political Science 3320, 4333 A or B, 4344, 4351
- Economics 3322, 3353
- Sociology 4305, 4330, 4345
- Geography 3328
- Anthropology 2312 or 2314

Asian Area (select 12 semester hours):
- Political Science 3320, 4333 A or B, 4350
- History 3330, 4318, 4334
- Economics 3322, 3353
- Geography 4327, 4329
- Anthropology 3320
- Religion 3360

International Education
The American Association of State Colleges and Universities (AASCU), to which this University belongs, has established centers for international study in Puebla, Mexico; Montreal, Canada; and Rome, Italy, with others projected in various parts of the world. Complete programs of study — summer, one semester or a full year, are available with transferred credit guaranteed. For further information, contact the AASCU Campus International Education Adviser (CIEA).
Department of Sociology-Anthropology

Rollo K. Newsom, Associate Professor and Chairman
Professors: Corrie, Schultz
Associate Professors: D.E. Jorgenson, Matlock, *Millsap, O’Connell, Short, **Whalen
Assistant Professors: Ford, Hilbert, Lane
Instructors: Abney, Gray, R.H. Moore, Munn, Wood

Institute of Social Work

Elmer L. Good, Associate Professor and Director
Associate Professor: Brennen
Assistant Professor: Hicks, Murillo
Instructor: K.D. Brown

Bachelor of Arts Degree
(128 semester hours)

Notes:

1. A major in sociology requires 30 semester hours including a minimum of 18 semester hours of advanced courses.
2. All majors are required to take Sociology 2310 (or 3300), 3305 (or 3306), 3307, and 3308.
3. Students may also obtain a secondary teaching certificate with the Bachelor of Arts degree and a sociology major by taking a minimum of 18 required semester hours in education, and substituting for the minor a second teaching field of 24 semester hours.
4. A minor in anthropology requires 26 semester hours, including Anthropology 2312, 2414, 2415, and at least nine advanced semester hours. A major in anthropology is not offered.

Suggested Degree Plan

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1310, 1320</td>
<td>6</td>
<td>English (literature)</td>
<td>6</td>
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<tr>
<td>History 1310, 1320</td>
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<td>Modern Language</td>
<td>8</td>
</tr>
<tr>
<td>Science</td>
<td>7-8</td>
<td>Mathematics and/or</td>
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</tr>
<tr>
<td>Speech Communication 1310</td>
<td>3</td>
<td>Philosophy 2330 (Logic)</td>
<td>6</td>
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<td>Philosophy 1305</td>
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<td>Political Science 2310, 2320</td>
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<td>33-34</td>
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<td>34</td>
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</tbody>
</table>

*Faculty Development Leave, Fall (1/2) 1980, Spring (1/2) 1981.
**Leave-of-Absence, Spring, 1980.
Bachelor of Science in Education Degree
(128 semester hours; includes certificate)

Notes:

1. A Bachelor of Science in Education degree with a sociology major is offered for students who wish to become sociology teachers in the secondary school. Students choosing this degree plan must complete 24 semester hours in a second teaching field and 18 semester hours of required courses in education.

2. A Bachelor of Science in Education with an academic specialization of 18 semester hours in sociology (for elementary majors) may be taken. See Department of Education for requirements.

3. Sociology may be selected as the major area of subject concentration for a Bachelor of Science in Education degree with a social science major. Secondary teacher certification is obtained in this program. Twenty-four semester hours of sociology are required, including Sociology 2310 (or 3300), 3305 (or 3306), 3307, and 3308. See the Department of History for full degree requirements.

Suggested Degree Plan

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Sociology</td>
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<td>Political Science 2310, 2320</td>
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<td>Science, Mathematics, or</td>
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<td>Science, Mathematics, or</td>
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<tr>
<td>Modern Language</td>
<td>6-8</td>
<td>Modern Language</td>
<td>6-8</td>
</tr>
<tr>
<td>Speech Communication 1310</td>
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<td>Physical Education activity</td>
<td>2</td>
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<td>32-34</td>
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<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Hours</th>
<th>Senior Year</th>
<th>Hours</th>
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<tr>
<td>Sociology</td>
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<td>Sociology</td>
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<td>Second teaching field</td>
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<td>Second teaching field</td>
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</tr>
<tr>
<td>Education 3312, 3330</td>
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<td>Education 4331, 4332, 4681</td>
<td>12</td>
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<td>Philosophy 3201 (pr 1305)</td>
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<td>Electives</td>
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<td>Art, Theatre Arts, or Music</td>
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<td>Electives</td>
<td>1-6</td>
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<td></td>
<td></td>
<td></td>
<td>29-36</td>
</tr>
</tbody>
</table>
Bachelor of Social Work Degree
(130-135 semester hours)

Notes:

1. The major in social work requires 63 semester hours including 42 semester hours in social work, and 21 semester hours in supportive social sciences. The major in social work does not require the student to have a minor.

2. A minor in social work is a non-professional practice program requiring 18 semester hours, which includes Social Work 2350, 2375, 3330, 3335, plus six semester hours of social work electives, excluding 4645, 4650, and 4950.

3. To remain a social work major, a student:
   a. Must earn a minimum grade of “C” in each of the social work and required supportive courses.
   b. May not repeat more than two courses to maintain a minimum grade average of 2.00 in the major.
   c. May not repeat Social Work 4645, 4650, or 4950.

4. Before enrolling for Social Work 4645, 4650, or 4950, students must have absolved all prerequisites including grade of “C” or better in social work courses.

The student has a choice of taking two semesters of concurrent field practice (Social Work 4645 and 4650) or one semester of block practice (Social Work 4950). Students should restrict their course load to 12 semester hours, including Field Practice, during the semester in which they enroll in Social Work 4645 and 4650. Social Work 4950 requires a full-time commitment to the field placement, which precludes taking any other daytime course.

5. Required courses in social work include: Social Work 2350, 2375, 3330, 3335, 3340, 3355, 4305, 4625, 4645 and 4650 or 4950, two social work electives.

6. Required supportive courses in the social sciences include the following: Sociology 2310, 3319, 3327; Political Science 3316 or 3320 or 4312; Economics 2301, Psychology 2310, 2315 or 2330 or Anthropology 3370.

Suggested Degree Plan

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1310, 1320</td>
<td>6</td>
<td>Social Work 2350, 2375</td>
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<tr>
<td>History 1310, 1320</td>
<td>6</td>
<td>English (literature)</td>
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<td>Speech Communication 1310</td>
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<td>Political Science 2310, 2320</td>
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<td>Sociology 2310</td>
<td>3</td>
<td>Mathematics, Science or Logic</td>
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<td>Laboratory science</td>
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<td>Modern Language</td>
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<td>Modern Language</td>
<td>8</td>
<td>Psychology 2310</td>
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<td>Psychology 2315 or 2330 or</td>
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<td>Anthropology 3370</td>
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<td>Economics 2301</td>
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<td><strong>Total</strong></td>
<td><strong>34-36</strong></td>
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<td><strong>41-43</strong></td>
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</table>
### Courses in Sociology

Sociology 2310 is a prerequisite to all other sociology courses except Sociology 3300 and 3327.

#### 2310 Introduction to Sociology.  
(3-0) Basic sociological concepts as a foundation for an understanding of collective behavior, the processes involved, and relation of human nature and culture to personality.

#### 2315 Sociological Methods.  
(3-0) Strongly recommended for those students considering additional course work in sociology. The sociological analysis of society, with emphasis on a reading knowledge of the techniques employed by the sociologist in this study of the substantive qualities of human society.

#### 2320 Social Problems.  
(3-0) Community problems, significant social issues, and disorganization in major social institutions in contemporary American society.

#### 3300 Principles of Sociology.  
(3-0) Survey of the discipline of sociology, including socialization, social institution, collective behavior, urban and community studies, demography, race relations, culture and personality. Emphasis on basic concepts and the behavioral science approach to the study of human groups. Sociology 2310 and 3300 may not both be counted for credit.

#### 3305 History of Sociology.  
(3-0) A survey of the historical development of sociology and the theories of the major sociologists.

#### 3306 Contemporary Sociological Thought.  
(3-0) A survey of major theories and schools of thought pervasive in modern sociology.

#### 3307 Statistics for the Behavioral Sciences.  
(3-0) The application of elementary descriptive statistics, statistical inference, and correlation and regression to sociological and other behavioral science data with an emphasis on the relationship of theory and method in the research setting.

#### 3308 Introduction to Social Research.  
(3-0) The logic and basic techniques in sociological research.  
Prerequisite: Sociology 3307.

#### 3319 Social Psychology.  
(3-0) The basic course in social psychology; the nature of the individual in society; the process of socialization; the human personality; personality and social adjustment; and social interaction.

#### 3324 Life Styles.  
(3-0) The study of inequality as it relates to occupational, educational, religious, political, and other social activities.

#### 3325 Social Deviation.  
(3-0) Theoretical and descriptive analysis of the major types of deviant behavior.

#### 3327 Minority Groups.  
(3-0) The nature and the problems inherent in racial and other minority groups, with special reference to the American scene.

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### Junior Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Social Work 3330, 3335, 3340, and 3355</td>
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<tr>
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<tr>
<td>Philosophy 3201 (or 1305)</td>
<td>2-3</td>
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<tr>
<td>Art, Theatre Arts, or Music 3213 (or 2300)</td>
<td>2-3</td>
</tr>
<tr>
<td>Sociology 3319, 3327</td>
<td>6</td>
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<tr>
<td>Political Science 3316 (or 3320 or 4312)</td>
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**Total Hours:** 32-33

### Senior Year

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<tr>
<td>Social Work 4305, 4625</td>
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<td>Social Work 4645 and 4650 (or 4950)</td>
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<td>Social Work elective</td>
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<tr>
<td>Electives</td>
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**Total Hours:** 30-33
<table>
<thead>
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<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>3337</td>
<td>The Family. (3-0) A comparative study of the family in various cultures, both historical and contemporary, with attention to the family in terms of social organization, social change, and social disorganization.</td>
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<tr>
<td>3340</td>
<td>Sociology of Leisure. (3-0) A consideration of the conceptual and theoretical framework of the sociology of leisure; an examination of research related to leisure participation; attention given to leisure sub-areas of sport, popular culture, mass communication, recreation, play, and games.</td>
<td></td>
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<tr>
<td>3343</td>
<td>Criminology. (3-0) The various theories of crime, the causes of crime, areas of crime, treatment of criminals through the courts, punishment, reform, education, probation and parole, and means of crime prevention.</td>
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</tr>
<tr>
<td>3347</td>
<td>Juvenile Delinquency. (3-0) Delinquency in modern society, basic factors and conditions of juvenile delinquency, and the problem of delinquency control.</td>
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<tr>
<td>3353</td>
<td>Urban Society. (3-0) A study of urbanization as a social phenomenon with attention to traditional sociological studies of the community.</td>
<td></td>
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</tr>
<tr>
<td>3363</td>
<td>Medical Sociology: The Sociology of Health and Illness Behavior. (3-0) An examination of the social determinants and consequences of human health, morbidity, and mortality, including considerations of health institutions, organizations, professionals and clients. Social epidemiology of human diseases and mortality and changing relationships of acute and chronic diseases are stressed.</td>
<td></td>
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<tr>
<td>3370</td>
<td>Industrial Sociology. (3-0) The social setting and formal organization of work; individual and group adaptation in industrial organization.</td>
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<tr>
<td>3375</td>
<td>Selected Topics in Sociology. (3-0) Sociological analysis and interpretation of selected topics of special interest in the areas of social organization, social disorganization and social interaction. Topics treated and instructors will vary from semester to semester. May be repeated with different topic for additional credit.</td>
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<tr>
<td>3383</td>
<td>The Sociology of Aging. (3-0) A study focusing on the processes of aging primarily in American society and including attention to the special problems related to the middle and later stages of the life cycle.</td>
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<tr>
<td>3384</td>
<td>The Sociology of Death and Dying. (3-0) A study of the sociological and social psychological perspectives on death and dying in contemporary societies with particular emphasis on the meanings of death, on dying as a social process, and on death in the context of both social organization and the life cycle.</td>
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<td>4305</td>
<td>Sociology of Religion. (3-0) The study of religion as a social institution in historical and contemporary cultures.</td>
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<tr>
<td>4315</td>
<td>Sociology of Occupations. (3-0) An examination of social organization in terms of the occupational structure with consideration of social behavior correlated with various occupational roles and statuses.</td>
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<tr>
<td>4320</td>
<td>Analysis of American Society. (3-0) A systematic survey of the major American social institutions and analysis of recent social trends.</td>
<td></td>
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</tr>
<tr>
<td>4330</td>
<td>Population. (3-0) Composition of the world's population; population growth, problems, policies, and controls.</td>
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</tr>
<tr>
<td>4332</td>
<td>The Sociology of Education. (3-0) An examination of education as a formal institution and as a social system. Emphasis is placed upon the nature and functions of education organization in modern societies.</td>
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<tr>
<td>4345</td>
<td>Social Change. (3-0) A critical examination of major theories and historical and contemporary examples of social changes, social movements, and social planning. Both Sociology 4345 and Anthropology 4345 may not be counted for credit.</td>
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</tr>
</tbody>
</table>
4360 Directed Study. (3-0) A one-semester course of independent reading, tutorial sessions, and individual research projects. Open to superior students of senior rank by invitation of the professor and with the consent of the chairman of the department. This course may not be repeated for credit.

Courses in Anthropology

2312 Cultural Anthropology. (3-0) The comparative study of human behavior emphasizing technology, social organization, and ideology in preliterate and contemporary cultures of the world.

2414 Physical Anthropology. (3-0) An introductory survey of the biological aspects of the study of man and the archaeological history of his development to the present. Taken in conjunction with Anthropology 2312, the course is designed to give basic knowledge of the discipline as a whole, and to provide the basis for further study in anthropology.

2415 General Archaeology. (3-0) A course designed to acquaint the student with the basic nature, methods, and goals of archaeology.

3305 Magic and the Occult. (3-0) An examination of magic and religion in cultures of the world with an emphasis on recent works dealing with mysticism and the occult.

3314 Latin American Cultures. (3-0) An examination of Latin American cultures with an emphasis on pre-Columbian and contemporary cultures of Mexico. (Taught on campus and in Foreign Studies Program.)

3315 Archaeology of the Southwest. (3-0) The course presents a theoretical and general background of archaeology in the Southwest, plus descriptions of prehistoric and historic Southwestern culture.

3316 Old World Prehistory. (3-0) A survey of the earliest appearance of man in Africa, Asia, and Europe, during the Pleistocene and his dual evolution physically and culturally on all continents of the Old World.

3321A,B,C Cultures of Asia. (3-0) A. China, Japan, and Korea. B. India and Southeast Asia. C. Middle East. A survey of the cultures of Asia. The social structure, economy, religion, language, current conditions, and problems of majority and minority Asian people will be examined.

3331A,B,C,D American Indian Studies. (3-0) A. North American Indians. A comparative study of Indian societies of North America, including pre-historic and contemporary cultural developments; B. Indians of the Great Plains. A detailed inquiry into the technology, social organization, beliefs, and ecological relationships of the Plains Indians in North America. Both the pre-historic and historic societies will be reviewed within the eco-setting of the Great Plains; C. Indians of the Southwest. A survey of the life and cultural patterns of Indian groups in the greater Southwest before and after Spanish and American contact; and D. Indians of the Eastern Woodland. An examination of Indian cultures in the Eastern United States. The nature of the White-Indian relationships will be assessed in an ethno historical perspective as the United States developed into a nation.

3340 Monkeys, Apes, and Men. (3-0) A survey of the evolution of the primates; classification, distribution, and ecological relationships of the living primates; social structure and social organization of a variety of species with a view toward better understanding of the evolution of early human behavior.

3345 Archaeology in Mesoamerica. (3-0) A study of the development of culture from early hunters and gatherers through the appearance of agriculture to the rise of civilization, with emphasis on major societies, political and religious systems, and their scientific and intellectual contributions.
3350 Women and Society. (3-0) This course examines the role of women cross-culturally in major culture areas of the world in terms of their ideal role, their daily/social role, their economic role, and their political role.

3370 Culture and Personality. (3-0) An examination of theoretical and methodical approaches to cross-cultural differences in personality: with an emphasis on such topics as childtraining, sex roles, world-view and self-view, mental illness, and psychological responses to social change.

4310 History of Anthropological Thought. (3-0) A critical evaluation of well-known anthropological works with special emphasis on theories relating to the study of culture.

4345 Social Change. (3-0) A critical examination of major theories and historical and contemporary examples of social change, social movements, and social planning. (Both Anthropology 4345 and Sociology 4345 may not be counted for credit.) See Sociology 4345.

4360 Directed Study. A one-semester course of independent reading, tutorial sessions, and individual research projects. Open to superior students by invitation of the professor and with the consent of the chairman of the department. This course may not be repeated for credit.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.

Courses in Social Work

Social Work 2350 is a prerequisite to all other social work courses except Social Work 1201, 1205, 1210, 1215, 3355.

1201 Introduction to Societal Health. (2-0) An introduction to physical, mental and/or emotional, and environmental health problems facing the social and health workers in the community.

1205 Dynamics of Human and Social Relations. (2-0) An introduction to the interpersonal, family, group, and community aspects necessary for good human and social relations by social and health service workers.

1210 Social and Health Delivery Systems. (2-0) An introduction to the service delivery systems available to cope with the various health problems which face social and health workers in the community.

1215 Social Study and Information Collection. (2-0) An introduction to the methods of interviewing and obtaining basic information necessary for providing adequate social and health services to individuals and groups.

2350 Introduction to Social Work. (3-0) An introductory survey of the field of social work including the nature, function, social welfare policy, and various types of social work. This course is designed to acquaint the student with the history, social welfare policy, and scope of the field of social work.

2375 Social Services in the Community. (3-0) An introductory experience to the various fields of social service and field practice which includes fifty hours of observation and volunteer work and service delivery in selected social service agencies. This course also covers the organizational structure of social services agencies and the knowledge, skills, methods, and values operating in social work practice.

3310 Poverty in the United States. (3-0) Poverty in the United States will be explored cross-culturally in terms of its cost to human beings and to society. The role of the social worker in combatting poverty and its effects will be a major concern of the course.
3330  Community Organization Methods in Social Work. (3-0) Social Work intervention at the macro level including task oriented groups, boards, administration, locality development, planning, social action, and grantsmanship.  
Prerequisite: Social Work 2350, 2375, and junior standing.

3335  Interpersonal Methods in Social Work. (3-0) Social work at the micro and meso levels providing interpersonal knowledge and techniques for practices in social service agencies. It incorporates one-to-one relationships and interpersonal group work as generic intervention techniques.  
Prerequisite: Social Work 2350, 2375, and junior standing.

*3339  Selected Topics in Social Work. (3-0) This course is designed with the potential for timely presentation of topical subject matter in social work and the social services. Sub-titles and subject matter may well vary from one presentation to the next, but will remain within the confines of the social work discipline and its interests.  
Prerequisite: Social Work 2350.

3340  Social Work Research. (3-0) A study of basic social work research concepts and methods with emphasis on the utilization of existing related research, the development of beginning skills in social work research and evaluation. Emphasis will be given to the relevance of accountability and effectiveness to social practice.

3355  Social Legislation. (3-0) A survey of social legislation pertaining to the social welfare and rights of the individual in today's society, the general legislative process, and social welfare policy.

4305  Seminar in Human Behavior and Social Environment. (3-0) Exploration of the interdependence of the person with his primary and secondary group affiliation, the community, cultural norms, and society.  
Prerequisite: Social Work 2350, 2375, 3330, and 3335.

4310  Social Work in Ethnic Communities. (3-0) An introduction to the role of ethnic communities in the United States with emphasis on skills, methods and intervention techniques appropriate to social work practice. Content includes characteristics of ethnic individuals and ethnic communities, problems in disadvantaged ethnic communities, and the role of social services in ethnic communities.

4315  Child Welfare. (3-0) An analytical consideration of the various child welfare services available to children in their own homes, in substitute care, and through the community. The aspects of protective services, including neglect and abuse, day care, homemaker services, interpersonal counseling, and financial assistance are explored in terms of the role of the child welfare practitioner.

4360  Directed Study in Social Work. (3-0) A one-semester course of independent reading and study, individual instructional and discussion sessions, and individual projects. Open to superior students by invitation of the professor and with the consent of the chairman of the department, and the Director of Social Work. This course may not be repeated for credit.  
Prerequisite: Social Work 2350, 3330, and 3335.

4625  Communication and Process Skills in Social Work. (6-0) Training in basic technical skills necessary for the individual workers in the social services and for the operation of social service agencies at all levels of intervention.  
Prerequisite: Social Work 2350, 3330, 3335.

4645  Beginning Field Practice in Social Work. (6-0) Beginning experience providing opportunities for observations of and participation in social welfare services in the community. The student is engaged in closely supervised provision of direct services. During the Fall and Spring semester the student is in an

*May be repeated once with different emphasis for additional credit.
agency a minimum of 4 clock hours per day, 5 days per week. During the Summer term the student is in the agency 8 clock hours per day, 5 days per week for 9 weeks.

4650 Field Practice in Social Work. (6-0) Experience providing opportunities for observation of and for surveying direct social services at all levels of intervention in the community. The student is required to spend 300-400 hours of internship in assigned agency operations in addition to scheduled seminar and University assignments.

Prerequisite: Social Work 3330, 3335, and 4625 and senior standing.

4950 Comprehensive Field Practice in Social Work. (9-0) This course combines the requirements of Social Work 4645 and 4650 into a block, comprehensive field placement. The student is placed full time in the agency a minimum of 8 clock hours per day, five days per week. This course is not offered during the summer sessions.

Prerequisite: Senior standing and completion of all other social work degree requirements.
Occupational Education

Michael J. Pierson, D.Ed., Director
Occupational Education

Michael J. Pierson, Associate Professor and Director

Bachelor of Science in
Occupational Education Degree
(128 semester hours)

The Bachelor of Science in Occupational Education degree is intended to provide opportunities for individuals to earn a degree from Southwest Texas State University with a major in an occupational area, which may be based upon credits earned from work/life experience, service schools, or credits from other accredited institutions of higher learning.

Credits for work/life experience will be awarded by committee action on an individual basis. The committee consists of members of the University faculty.

The Bachelor of Science in Occupational Education degree is an individualized degree administered through the Office of Occupational Education. Counselors structure each program to the needs of the student. The major thrust of the degree is to prepare vocational/technical teachers.

Bachelor of Applied Arts and Science Degree

In addition to the Bachelor of Science in Occupational Education degree, the Bachelor of Applied Arts and Sciences degree is offered for students who are pursuing a professional development sequence in management and human relations. This degree also awards semester hour credit for demonstrated knowledge and skill obtained in business and/or industry.

Academic Foundations
(44-46 semester hours)

Freshman English
American History
American Government
Science, Mathematics, Modern Language (from two fields)
Speech Communication or English Literature or Computer Science
The Arts, or Philosophy or Sociology or Psychology
English Literature
Physical Education activity

*Academic Specialization
(48 semester hours)

Professional, Technical, and Managerial Occupations
Clerical and Sales Occupations
Service Occupations
Farming, Fishery, Forestry, and Related Occupations
Processing Occupations
Machine Trades Occupations
Bench Work Occupations
Structured Work Occupations

*Semester hour credit may be awarded for demonstrated knowledge and skills obtained in business and industry, not limited to the above.
Electives
(8-12 semester hours)
Eight-twelve semester hours of complementary electives are chosen with the advice of the student's degree counselor.

Professional Development
(24 semester hours)
Professional development sequences are offered in the general areas of education, management, and human relations. Other approved sequences may be selected to meet individual needs of students. The professional development sequence normally consists of 18 semester hours of courses plus a six semester hour Internship.

Students who choose the Educational Professional Development sequence may be certified in Trade and Industrial Education, Industrial Cooperative Training, Coordinated Academic Vocational Education, or Driver Education, provided they satisfactorily complete the required courses and meet other Texas Education Agency criteria.

Vocational-Industrial Education
Education 3301, Methods of Teaching Vocational Subjects.
Education 3302, Development, Organization, and Use of Instructional Material.
Education 3303, Aims and Objectives of Vocational Education.
Education 3304, Human Relations for Vocational Education Teachers.
Education 3305, Shop and Classroom Organization and Management.
Education 3306, Analysis and Course Making.
Internship (six semester hours)
This sequence certifies a student for a certificate in Trade and Industrial Education. The certificate is presented after the student has taught in the public schools for two years. Students can also be certified in Industrial Cooperative Training or Coordinated Academic Vocational Education upon completion of Education 3307 and 3308 in lieu of Education 3305 and 3306.

Criminal Justice
Criminal Justice 3323, Supervision.
Criminal Justice 4311, Seminar in Special Law Enforcement Problems.
Criminal Justice 4320, Current Vice and Narcotic Enforcement Problems.
Criminal Justice 4350, Contemporary Legal Issues in Law Enforcement.
Criminal Justice, six hours advanced electives.
Internship (six semester hours)

Business Management
Accounting 2361, Elementary Accounting I.
Accounting 2362, Elementary Accounting II.
Management 3303, Principles of Management.
Marketing 3343, Marketing.
Business Administration 3353, Business Communications.
Management 4375, Human Relations in Business.
or
Computer Information Systems 2320, Introduction to Data Processing.
Internship (six semester hours)
Human Relations
Psychology 3317, Industrial Psychology.
Psychology/Sociology 3319, Social Psychology.
Psychology 3320, Behavior Modification.
Sociology 3300, Principles of Sociology.
Sociology 3325, Social Deviation.
Sociology 3337, The Family.
or
Sociology 3353, Urban Society.
Internship (six semester hours)

Journalism
Journalism 3319, Picture Editing.
Journalism 3323, Feature and Magazine Article Writing.
Journalism 3367, Advertising.
Journalism 3385, Editing II.
Journalism 4310, Public Affairs Reporting.
Journalism 4320, Public Relations Campaigns.
Internship (six semester hours)

Public Administration
Political Science 3314, State and Local Government.
Political Science 3316, Introduction to Public Administration.
Political Science 3318, Public Personnel Administration.
Political Science 3328, Public Finance Administration.
or
Political Science 3387, Statistics for the Behavioral Sciences.
Political Science 4312, The Administrative Process.
Political Science 4361, Administrative Law.
Internship (six semester hours)

Technology Education
Industrial Arts 1413, Engineering Design Graphics.
Industrial Arts 1450, Photography.
Industrial Arts 1320, Woods.
Industrial Arts 1330, Metals.
Industrial Arts 2344, Power Technology I.
Industrial Arts 2365, Printing.
Industrial Arts 2370, Electricity/Electronics Fundamentals.
Industrial Arts 4380, Safety Education.
Students will not be required to serve an Internship in Technology Education.

Safety Education
Psychology 3317, Industrial Psychology.
Industrial Arts 4380, Safety Education.
Industrial Arts 4383, Driver and Traffic Safety Education I.
Industrial Arts 4385, Driver and Traffic Safety Education II.
Industrial Arts 4387, Motorcycle Safety and Rider Education.
Industrial Arts 4393, Driver and Traffic Safety Education III.
Criminal Justice 3342, Police Traffic Planning and Management.
Health Education 2354, First Aid.
or
Health Education 4311, Organization and Administration of a School Health Program.
This sequence certifies students in Driver Education for the secondary schools. Students will not be required to serve an internship in Safety Education.

**Real Property Valuation**
Finance 3301, *Real Estate*.
Finance 3324, *Real Estate Appraisal*.
Finance 4319, *Financial Institutions*.
Finance 4329, *Real Estate Management*.
Political Science 4361, *Administrative Law*.
Geography 4330, *Field Methods*.
Internship (six semester hours)
This sequence is approved by the American Society of Appraisers.

**Personal Property Valuation**
Home Economics 1346, *Textiles*.
Home Economics 2362, *History of Furnishings*.
Home Economics 2332, *Meal Management*.
Music 3350, *Music Understanding and Listening*.
Art 1373, *Introduction to the Visual Arts*.
Home Economics 4350, *Practicum in Home Economics* (Rare Books)
Internship (six semester hours)
This sequence is approved by the American Society of Appraisers.

**Ad Valorem Tax Valuation**
Finance 3301, *Real Estate*.
Finance 3324, *Real Estate Appraisal*.
Industrial Arts 1450, *Photography*.
Political Science 4361, *Administrative Law*.
Geography 4330, *Field Methods*.
Internship (six semester hours)
This sequence is approved by the American Society of Appraisers.

**Guidance Associate**
Education 2350, *Introduction to Guidance and Counseling*.
Education 2353, *Introduction to Group Testing*.
Education 2385, *Survey of Technical-Vocational Education*.
Education 3355, *Career Information: Occupational and Vocational*.
Education 3363, *Developmental Approaches to Personal-Social Areas of Guidance*.
Internship (six semester hours)
This sequence certifies a student as a Guidance Associate.

**Industrial Management and Distribution**
Industrial Arts 4380, *Safety Education*.
Geography 3313, *Natural Resource Use and Planning*.
Geography 4313, *Environmental Planning*.
Geography 4336, *Transportation Systems*.
Geography 4350, *Solid Waste Disposal Planning and Management*.
Management 4330, *Management of Industrial Production*.
    or Management 3303, *Principles of Management*.
Internship (six semester hours)
Vocational Office Education

Education 3301, Methods of Teaching Vocational Subjects (Instructional Strategies in VOE Programs)
Education 3303, Aims and Objectives of Vocational Education
Education 3306, Analysis and Course Making
Education 3307, Selection, Placement, and Follow-up in Vocational Education (Organization and Implementation of Cooperative VOE Programs)

Six hrs. of Advance Electives (must have prior approval of Advisor)
Internship (six semester hours)

The certificate is presented after the student has taught in the public schools for two years and completed orientation of new teachers during summer VOE workshop. Coordinated Vocational Academic Education and Vocational Emotional Handicapped—Office Duplication Practice teachers must complete "Teaching Procedures and Machines in Office Services," offered during summer workshop.
School of Science

Willard C. Young, Ph.D., Dean

Department of Biology .................. Herbert H. Hannan, Ph.D., Chairman
Department of Chemistry .................... Billy J. Yager, Ph.D., Chairman
Department of Mathematics and Computer Science .................. Robert A. Northcutt, Ph.D., Chairman
Department of Physics .................. Victor E. Michalk, Ph.D., Chairman
Department of Biology
(Including General Science)

Herbert H. Hannan, Professor and Chairman
Associate Professors: Aron, Baccus, Huffman, Koehn, Longley, Meyer, E. L. Schneider
Assistant Professors: C. P. Benjamin, G. G. Farr, Fonteyn, Koke, M. C. Lewis, Marek, Tupa, Woosley
Instructors: M. B. Harper, W. D. Hinkson, S. S. Schneider, R. B. Shaw

An undergraduate major in biology consists of a minimum of 34 semester hours (10 courses), and a maximum of 42 semester hours (or 12 courses) excluding Biology 3351.

An undergraduate minor in biology consists of a minimum of 21 semester hours of which six are advanced excluding Biology 3306. With biology as a second teaching field, 24 semester hours are required of which 13 must be advanced excluding Biology 3306, 3320, and 3351. A year of chemistry is required in either case.

Undergraduate biology majors, minors, or those with biology as a second teaching field also are not to include Biology 1310, 2440, 3305, and 4305 as part of their required courses.

Bachelor of Science in Education Degree
(128 semester hours; includes certificate)

Notes:

1. Certification is in biology and chemistry.
2. Certification is available in a second teaching field other than chemistry, but may require extra hours; however, in this event Chemistry 3410, 4465 and 4375 and 4275 may be omitted.
3. Education 4331, 4332 and 4681 must be taken during the same semester.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Biology 1410, 1420</td>
<td>8</td>
<td>Biology 2430, 3450</td>
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<td>English 1310, 1320</td>
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<td>History 1310, 1320</td>
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<td>English (literature)</td>
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<td>Mathematics 1315, 2321</td>
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<td>Speech Communication 1310</td>
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*Faculty Development Leave, Spring, 1980.
**Faculty Development Leave, Fall, 1979.
***Faculty Development Leave, Fall (1/2) 1979, Spring (1/2) 1980.
### Bachelor of Arts Degree
(131 semester hours with 40 advanced)

**Note:** A teaching certificate is available with this degree but may require extra hours.

<table>
<thead>
<tr>
<th>Freshman Year</th>
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<th>Sophomore Year</th>
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</thead>
<tbody>
<tr>
<td>Biology 1410, 1420</td>
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<tr>
<td>English 1310, 1320</td>
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<td>History 1310, 1320</td>
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<td>Mathematics 1315, 2321</td>
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<th>Senior Year</th>
<th>Hours</th>
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<tr>
<td>Biology (see area of emphasis)</td>
<td>9-10</td>
<td>Biology (see area of emphasis)</td>
<td>9-12</td>
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<tr>
<td>Modern Language 1410, 1420</td>
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<td>Political Science 2310, 2320</td>
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<td>Philosophy 3201</td>
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<td><strong>Total</strong></td>
<td>33-38</td>
<td><strong>Total</strong></td>
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### Bachelor of Science Degree
(128 semester hours)

**Notes:**

1. Recommended minor is chemistry.
2. A teaching certificate is available with this degree but may require extra hours.

*Or English 2351 and three semester hours literature.
** Or Speech Communication 3351.
### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<td>English 1310, 1320</td>
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<tr>
<td>History 1310, 1320</td>
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<tr>
<td>Mathematics 1315, 2321</td>
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<tr>
<td>Chemistry 1410, 1420</td>
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<tr>
<td>English 2351 and three hours</td>
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<tr>
<td>Literature</td>
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<tr>
<td>Physics 1410, 1420</td>
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<td>Mathematics 2331</td>
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### Junior Year

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<td>Philosophy 3201</td>
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<td>Minor</td>
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### Senior Year

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<td>Biology (see area of emphasis)</td>
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<td>Political Science 2310, 2320</td>
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### Areas of Emphasis

#### General Biology
Requirements: Biology 3480 or 3490 or 3495, and five advanced courses.

#### Botany
Requirements: Biology 3360, 3365, 3410, 4411, 4412, and 4454.

#### Zoology
Requirements: Biology 2360 or one advanced course, 3470, 3480 or 3490 or 3495, 4365, and two advanced courses.

#### Aquatic Biology
Requirements: Biology 2360, 4315, 4316, 4370, and two advanced courses.
Chemistry 3410.

#### General Physiology
Requirements: Biology 3320, 3365, 3440, 4330, 4340, and one advanced course.
Chemistry 3410 and 4465.

#### Microbiology
Requirements: Biology 3440, 3442, 4440, 4445, and two advanced biology courses, Chemistry 3410, 4275, and 4375.

#### Marine Biology
Requirements: Biology 3322, 3470, and 12 to 19 semester hours of marine biology. Marine biology must be taken at Moody College of Marine Biology, Galveston, Texas, and/or The University of Texas Marine Institute, Port Aransas, Texas. At least 60 semester hours of work to include a minimum of four courses in biology must be completed at Southwest Texas University. See the departmental chairman for details of this program.

#### Wildlife Management
Requirements: Biology 3360, 4321, 4322, 4323, 4454, and two of the following: 4316, 4325, 4365.

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*Or six hours English (literature).*
Courses in Biology

*1310 Principles of Biology. (3-0) Basic biological principles such as the scientific method, cell theory, organismal functions, evolution, genetics, population dynamics and ecology are surveyed. Biology 1410 or Biology 1420 must be completed before this course will be accepted for credit toward a degree. May not be credited toward a biology major or minor or secondary teaching field. (F, S, SS).

*1410, 1420 General Biology. (3-2) Biology 1410 is concerned with the study of biological principles and the anatomy and physiology of plant groups in lecture and laboratory. Biology 1420 includes the study of the animal kingdom, human organ systems and heredity. Examples of the various animal groups and the dissection of the frog are studied in the laboratory. (F, S, SS)

2340, 2350 Human Anatomy and Physiology. (3-2) The study of digestion, metabolism, the nervous system, the muscular system, the endocrine system, respiration, circulation, and reproduction and their application to health and hygiene. (F, S, SS)

Prerequisite: A year of chemistry or biology should be completed prior to registering for this course.

2360 Aquatic Biology. (2-3) An introduction to plant and animal life in the fresh water habitats of the local area. (F, S, SS)

Prerequisite: Biology 1410 and 1420.

2430 Human Physiology and Anatomy. (3-4) A course on human physiology covering the various organ systems. Principles of molecular biology, cell and tissue structure, anatomy and the relationship of structure and function are stressed. Specifically designed for (1) biology majors requiring only a one-semester human physiology course and (2) home economics majors. (F, S, SS)

Prerequisite: One semester of general biology.

2440 Principles of Microbiology. (3-3) The Basic Principles of microbiology, morphology, physiology, immunology and the relationship of microorganisms to diseases. This course is designed primarily to meet the requirements for students in allied health sciences and other programs requiring only one semester of microbiology. This course may not be credited toward a biology major or minor or secondary teaching field. (F, S, SS)

3305 The History and Philosophy of Science. (3-0) Literature devoted to the life and times of outstanding philosophers in the fields of science and the part which science has and in the evolution of human institutions. Open to any student with one year of science and at least junior standing. May not be credited toward a biology major or minor or secondary teaching field. (S)

3306 Plants for Mankind. (3-0) An introduction to the utilization of plants by humans and the current economic and ecological significance of plants to society. The usefulness of plants in medicine, industry and agriculture will be stressed. Restricted to those students seeking an area of emphasis in botany or an elective (non-science) course. (S)

3320 Advanced Mammalian Physiology. (3-3) The physiology of each of the mammalian organ systems is studied in detail. In the laboratory, physiology of various organ systems is studied by using anesthesia, surgery and physiological equipment. May not be credited toward a second teaching field by students receiving a teaching certificate.

Prerequisite: Biology 2340-2350 or 2430 is recommended.

3322 Oceans and Estuaries. (3-3) The study of the physical, morphometric and chemical aspects of oceans and estuaries with emphasis on the flow of ener-
gy within the marine environment. At least three field trips are taken to visit marine stations and to collect material for analysis on campus. The course is designed specifically for those students with an area of emphasis in marine biology. (S)

Prerequisite: Biology 1410 and 1420. Biology 3470 is recommended.

3351 General Genetics. (3-0) Basic principles of genetics which relate to the problems of human populations. A course in genetics for non-science majors. May not be credited toward a biology major or a second teaching field. (F)
Prerequisite: Two semesters of general biology.

3352 Plant and Animal Genetics. (3-0) Basic principles of heredity and their specific application to higher plants and animals. May not be credited toward a biology major. (S)
Prerequisite: Two semesters of general biology.

3360 Plant Taxonomy. (3-3) Principles of identification and classification of plants; nomenclature and characteristics of various plant groups with emphasis on the higher plants. (F, S, SS)

3365 Plant Physiology. (3-3) Basic principles of plant physiology studied in lecture and laboratory. (F, S, SS)
Prerequisite: One year of biology and one year of chemistry. One semester of organic chemistry is strongly recommended.

3410 Morphology of Non-Vascular Plants. (3-3) A study of algae, fungi, charophytes, mosses and liverworts. Lectures and laboratory studies emphasize evolution, comparative morphology and culture techniques. (F)
Prerequisite: Two semesters of general biology.

3440 Microbiology. (2-6) Principles of microbiology, morphology, anatomy, physiology and taxonomy of representative groups of non-pathogenic organisms. Laboratory methods stress studies of pure cultures, the use of laboratory apparatus in quantitative determinations and the detection and identification of microbial populations in the environment. (F, S, SS)
Prerequisite: Biology 1410, 1420 and some organic chemistry or consent of the instructor.

3442 Immunology and Virology. (2-6) A study of immune responses, antigen-antibody reactions, antibody structure, hypersensitivities, and resistance to diseases. Virology includes the morphology, multiplication, and genetics of bacterial and animal viruses. (F)
Prerequisite: Biology 3440 and a semester of organic chemistry or consent of instructor.

3450 Genetics. (3-3) Basic principles of inheritance in plants and animals; inheritance patterns applied to population genetics and compared with genetics systems of Drosophila and lower organisms. Laboratory work includes breeding experiments with Drosophila, family history studies and tissue culture methods for chromosome studies. (F, S, SS)

3470 Invertebrate Zoology. (3-3) A study of the comparative morphology, evolution, systematics and natural history of invertebrates. (F)
Prerequisite: Biology 1410 and 1420.

3480 Histology. (3-6) Microscopic and ultrastructure of tissue are considered through lectures, demonstrations and prepared slides. Structural-functional relationships are stressed. (F)

3490 Vertebrate Embryology. (3-6) A comparative study of the processes and forms of vertebrate embryonic development with emphasis on the human. The laboratory includes the study of sea urchin, Amphioxus, frog, chick and pig embryos. (F, S)
3495 Comparative Vertebrate Anatomy. (3-6) A comparative study of structural evolution of the vertebrate body. The laboratory work consists of dissection and study of Amphioxus, lamprey, dogfish, Necturus, a reptile, a bird and/or mammal. This course is designed to suit the needs of biology majors and minors and pre-professional students. (F, S, SS)

4299 Undergraduate Research. Available only to biology majors with at least a “B” average, and with prior permission of a supervising professor. Does not supplant any of the courses necessary for the biology major. (F, S, SS)

4301-5301 Evolution. (3-2) Basic genetic principles applied to natural selection, adaptation, populations, speciation and man’s future. Consideration is given to the origin of life, nature of chromosomal variation, evolution of genetic systems and certain other selected topics. Laboratory is by special arrangement. (S, SS)

Prerequisite: Biology 3450 or its equivalent.

4302 Earth Science I. (2-3) The description and interpretation of earth phenomena considered form the standpoint of meteorology and astrosience. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Restricted to those taking a teaching certificate or elective (non-science) credit. May not be counted toward a teaching field in biology if credit is given for 4303. (F, SS)

4303 Earth Science II. (2-3) The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Restricted to those taking a teaching certificate or elective (non-science) Credit. May not be counted toward a teaching field in biology if credit is given for 4302. (S, SS)

4305-5305 Nature Study. (3-3) Designed for elementary teachers who intend to use natural materials in the teaching of elementary science. Includes the study of birds, insects, trees, flowers, elementary astronomy and environmental resources. May not be credited toward a biology major or minor or secondary teaching field. (S, SS)

4310-5310 Field Biology of Plants. (2-3) Ecological relationships and natural history of plants, including historical geology, geography, soils, vegetational regions and surface geology of central Texas. Emphasis is placed on plant-soil-water relationships to develop conservation concepts. Students will make a representative collection of plants. (F, SS)

4313-5313 Parasitology. (3-3) The biology and biological significance of the common parasites of man and animals. (S)

4315-5315 Ichthyology. (2-3) An introduction to the morphology, taxonomy, natural history and evolution of fishes. Field trips will be made to collect specimens and laboratory periods will be devoted to morphological and systematic analyses. (F, SS)

4316 General Ecology. (2-3) The ecological relationships that exist between organisms and those relationships that exist between organism and environment. Laboratory sessions will be devoted to literature review and/or specific ecological problems.

Prerequisite: Two semesters of general biology.

4320-5320 Field Biology of Animals. (2-3) Environmental relationships and natural history of invertebrates and vertebrates. Emphasis is upon taxonomy, speciation and biotic provinces. The laboratory will include field trips for the study and collection of animals in their natural habitats. Students will assemble a representative collection of animals. (S, SS)

*May be repeated for a maximum of four semester hours credit.
4321-5321 Ornithology. (3-3) Introduction to anatomy, behavior, ecology and identification of the birds of Texas. Laboratory will emphasize field studies of birds and their habitat requirements. (S)

4322-5322 Mammalogy. (3-3) The taxonomy, distribution, ecology, behavior and evolution of mammals with particular emphasis on wild mammals of the southwest. Laboratory will emphasize anatomy, identification, preparation of specimens and field exercises in the methods of population analysis. (S, SS)

4323-5323 Wildlife Management. (3-3) Applications of the principles of ecology and natural history to the management of wildlife habitats and control of wildlife populations. Laboratory will involve demonstrations and practice exercises with wildlife management techniques and instrumentation and field trips to observe wildlife management projects. (F)

4325-5325 Biometry. (3-0) Basic principles of statistical methods as applied to biological problems such as sampling techniques, analysis of data, experimental design and population dynamics. Emphasis will be on practical application. (S, SS)

Prerequisite: One year of mathematics.

4330-5330 Experimental Techniques. (2-3) Use of methods and instruments applicable to biological investigations, including colorimetry; UV-spectrophotometry; fluorescence; flame and atomic absorption spectrophotometry; paper, gas, gel filtration and ion exchange chromatography; radioactive counting; and electrophoresis. (F)

4340-5340 Cell Physiology. (3-3) A molecular approach to the functions of cells. Includes principles of thermodynamics, bio-energetics, membrane functions, and molecular genetics. (S)

4345-5345 Advanced Genetics. (3-2) Inheritance of biochemical and physiological characteristics, medical genetics and modifications of genetic systems by radiations and chemicals. The genetic systems of various organisms are included but reference and application to the genetic system of humans are emphasized. (S)

Prerequisite: Biology 3450 and a background in physiology. Biology 4301 and biochemistry are recommended.

4365-5365 General Entomology. (3-3) Principles of morphology, physiology and taxonomy of insects. Laboratory time will be devoted to a taxonomic study of the common Orders and families of insects. (F)

4370-5370 Limnology. (3-3) The physical, chemical biological factors affecting productivity in lakes, ponds and streams. Limnological sampling methods, chemical and biological analysis of samples and hydrographic surveying are included in the laboratory. (F, SS)

Prerequisite: Biology 2360 and Chemistry 3410, or consent of instructor.

4380-5380 Cytology and Microtechnique. (3-3) Microscopic and ultramicroscopic cellular structures; their origin, development and function. Typical and atypical nuclear and cellular reproduction. Various cytological techniques will be demonstrated, including histochemical methods, staining techniques, fluorescent microscopy and autoradiography. (S)

4411-5411 Morphology of the Vascular Plants. (3-3) The structure, life-cycles and evolution of fossil and living vascular plants. Emphasis on such topics as the origin of land plants, evolution of the ovule, angiospermy, the flower and fruit. (S, even years)

4412-5412 Plant Anatomy. (3-3) The anatomy of vascular plants stressing descriptive, development and comparative aspects of seed plants and the anatomical adaptations of plants to environmental factors. (S, odd years)
4440-5440  Pathogenic Fungi. (2-6) A general study of fungi with special emphasis on the taxonomy, sources, incidence, medical factors and host-pathogen relationships of pathogenic fungi. (S)
Prerequisite: Biology 3440 or consent of instructor.

4445-5445  Pathogenic Microbiology. (2-6) Pathogenic bacteria and their relationship to disease, emphasizing identification of selected groups of pathogens, epidemiology and the biological basis for resistance. (F, S)
Prerequisite: Microbiology 3440 or consent of instructor.

4454  Plant Ecology. (3-3) Fundamental principles of physiological and community plant ecology. Structure and function of plant communities and environmental and physiological dimensions of plant distributions and niches will be emphasized.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.

Courses in General Science

3310-3320  General Science. (3-2) A laboratory course designed to acquaint the student with the fundamentals of physical, biological, and earth science. Creditable only for elementary or special education degree candidates. (F, S, SS)

4302  Earth Science I. (2-3) The description and interpretation of earth phenomena considered from the standpoint of meteorology and astrosience. Includes field observations, methods of measurement and interpretation of data related to the physical environment and space technology. Restricted to those taking a teaching certificate or elective (non-science) credit. May not be counted toward a teaching field in biology if credit is given for 4303. (F, SS)

4303  Earth Science II. (2-3) The description and interpretation of earth phenomena considered from the standpoint of geology and oceanography. Includes field observations, methods of sampling and interpretation of data related to the physical environment. Restricted to those taking a teaching certificate or elective (non-science) credit. May not be counted toward a teaching field in biology if credit is given for 4302. (S, SS)
The faculty, facilities, library holdings, and curriculum of the Department of Chemistry have been approved by the American Chemical Society. The recipients of the Bachelor of Science degree having completed the curriculum outlined below are awarded certificates by the American Chemical Society stating that the minimum requirements for professional chemists have been fulfilled. This program is recommended as preparatory training for graduate or industrial work in chemistry.

The Bachelor of Arts degree is a liberal arts degree requiring only 32 semester hours of chemistry. It is designed for students who need a background in chemistry in preparation for other careers, i.e., medicine, dentistry, pharmacy, patent law, etc.

The Bachelor of Science in Education degree is for a first teaching field in chemistry. Chemistry may be chosen as the second teaching field by majors in other departments. If so, Chemistry 1410, 1420, 2410, 2420, 3410, 4465, and four semester hours advanced will be required for certification.

Notes:

1. A major in chemistry consists of Chemistry 1410, 1420, 2410, 2420, 3245, 3330, 3340, 3410, 4430, 4440, and at least six semester hours to be taken by election from Chemistry 4275, 4299, 4321, 4333, 4352, 4375 or 4385, 4412.
2. Minors are available in biology, computer science, mathematics, or physics. Students should consult departmental adviser before making a selection.
3. A student who minors in chemistry is required to absolve Chemistry 1410, 1420, 2410, 2420, 3410, and four semester hours advanced.
4. A student who minors in mathematics is required to absolve six to eight hours of biology, physics, or mathematics above the minimum courses outlined.
5. If a certificate is taken, English literature must be substituted for English 2351.

Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
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<tr>
<td>Chemistry 1410, 1420</td>
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<td>Chemistry 2410, 2420</td>
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</tr>
<tr>
<td>English 1310, 1320</td>
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<tr>
<td>Mathematics 2363 (or 2317)</td>
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<td>**English 2351</td>
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<td>Electives</td>
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31                           | 34    

*Faculty Development Leave, Spring, 1980.
**Or three hours of English (literature).
Bachelor of Arts Degree
(128 semester hours with 40 advanced)

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<tr>
<th>Freshman Year</th>
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<th>Sophomore Year</th>
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<tbody>
<tr>
<td>Chemistry 1410, 1420</td>
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<td>Mathematics 2371, 2372</td>
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<td>Political Science 2310, 2320</td>
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<td>Speech Communication 1310</td>
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<td>Modern Language</td>
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<td>Political Science 2310, 2320</td>
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<td>Art, Theatre Arts, or Music 3213 (or 2300)</td>
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<td>Minor</td>
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<td>Minor and elective courses</td>
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<tr>
<td>33-34</td>
<td>*Speech Communication 3351</td>
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Notes:
Minors may be selected from agriculture, art, computer science, economics, English, French, geography, German, health and physical education, history, industrial arts, journalism, mathematics, music, political science, physics, psychology, sociology, Spanish, and speech communication.

Bachelor of Science in Education Degree
(128 semester hours; includes certificate)

Notes:
1. Certification is in chemistry and a second teaching field to be chosen from biology, computer science, mathematics, or physics.
2. Certification is available also in other second teaching fields, but will require extra semester hours.
3. Education 4331, 4332, and 4681 must be taken during the same semester.

*Or Speech Communication 1310.
### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Chemistry 1410, 1420</td>
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<td>English 1310, 1320</td>
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<tr>
<td>History 1310, 1320</td>
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<tr>
<td>Mathematics 1315, 2321, 2331</td>
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### Sophomore Year

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<td>Speech Communication 1310</td>
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<td>Political Science 2310, 2320</td>
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### Junior Year

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<td>Education 3312, 3330</td>
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<tr>
<td>Philosophy 3201 (or 1305)</td>
<td>2-3</td>
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<tr>
<td>Art, Theatre Arts or Music 3213 (or 2300)</td>
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<td>Electives</td>
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### Senior Year

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<tr>
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<tbody>
<tr>
<td>Chemistry 4465</td>
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<tr>
<td>Chemistry, advanced</td>
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<tr>
<td>Second teaching field</td>
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<tr>
<td>Education 4331, 4332, 4681</td>
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<td>Electives</td>
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<td><strong>Total</strong></td>
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</table>

### Courses in Chemistry

**1210 Introductory Pharmacology.** (2-0) The course in pharmacology is designed to familiarize the student with the general principles of drug action, methods of administration, elements of dispensation, and with the adverse reactions to drugs. See Allied Health Sciences 1210.

**1310 Introductory Chemistry for Non-Science Majors.** (3-1) A one-semester principles course for students in non-science related majors which covers not only the major concepts of chemistry (chemical theory, stoichiometry, bonding and elementary thermodynamics) but also the role of chemistry in problems of contemporary society (energy, pollution, water, etc.). The course may be followed by Chemistry 1430 for academic foundations credit.

**1410, 1420 General Chemistry.** (3-3) Courses in general chemistry for science and science related majors covering the general theories of chemistry; preparation, properties, and uses of common elements and their compounds; qualitative and quantitative analysis. Nonscience majors are advised to take 1430 in lieu of 1420.

**1430 Chemistry for Non-Science Majors.** (3-3) A one semester course which surveys organic and biochemistry and may include petro-chemistry, nuclear chemistry, synthetic and natural polymers.

Prerequisite: Chemistry 1310 or 1410.

**2130 Laboratory Technique in Organic Chemistry.** (0-3) An optional laboratory to accompany Chemistry 2330, covers experimental techniques of preparation, purification, and determination of physical and chemical properties of organic compounds. (F, SS-I)

Prerequisite: Chemistry 1420.

Corequisite: Chemistry 2330.

**2330 Organic Chemistry.** (3-0) A one-semester course which covers nomenclature, structure and reactions of organic compounds. Natural products and synthetic materials of importance to students of nutrition, allied health sciences and agriculture will be emphasized. (F, SS-I)
2410, 2420  Organic Chemistry. (3-4) Course covers general principles, theories, preparation and reactions of elementary organic chemistry with special emphasis on the classes, characteristics and structures of compounds. Laboratory covers techniques as well as study of typical reactions. Course meets premedical requirements.
Prerequisite: Chemistry 1420.

2450  Biochemistry. (3-3) A one-semester study of carbohydrates, proteins, lipids, and vitamins which present digestion, absorption, and intermediary metabolism along with an introduction of the function of enzymes and coenzymes in these processes. Course is designed for students majoring in nutrition, allied health sciences, and agriculture.
Prerequisite: Chemistry 2330 or 2420.

3245  Physical Chemistry Laboratory. (0-6) Experiments illustrating principles and methods of physical chemistry are performed. Written reports on the experiments are prepared. (S)
Prerequisite: Chemistry 3330 and Physics 1420 or 2420.
Corequisite: Chemistry 3340.

3330, 3340  Physical Chemistry. (3-0) The first course covers the theory of gases, liquids and solids; properties of solutions, elementary principles of thermodynamics and thermochemistry, phase rule, and electrochemistry. The second covers chemical kinetics, quantum mechanics, spectroscopy, and statistical thermodynamics. (3330-F, 3340-S)
Note: Chemistry 3245 must be completed to obtain credit for Chemistry 3330 and 3340.
Prerequisite: Chemistry 3410, Physics 1420, or 2420, Mathematics 2372.

3410  Quantitative Analysis. (3-6) Course covers the general theory and practice of typical methods of gravimetric and volumetric analysis, satisfies the quantitative analysis requirements for chemistry majors, minors, pre-medical and pharmacy students. (F, S, SS-I)
Prerequisite: Chemistry 1420.

4275-5275  Laboratory Techniques in Biochemistry. (1-6) Experiments illustrating principles and methods of biochemistry are performed. Emphasis is placed on the use of instrumentation employed in research on animal, microbial and plant tissue. (F, S)
Note: Chemistry 4375 or 4385 is a corequisite or prerequisite for this course.
Prerequisite: Chemistry 4310, 4375 or 4385.
Corequisite: Chemistry 4375 or 4385.

4299  Undergraduate Research. (0-4) This course is available to undergraduate chemistry majors only. It may be repeated but a maximum of four semester hours from this course are applicable toward the Bachelor of Science degree.
Prerequisite: Permission of department.

4321  Advanced Organic Chemistry. (3-0) A study of the relation of the following topics to structure and reactions of organic compounds: Bonding, stereochemistry, acid-base concepts, physical organic chemistry, reactive species.
Prerequisite: Chemistry 2420, 3340 (or 4465 and permission of instructor).

4333  Spectroscopy. (3-0) The study of various spectrometric techniques in qualitative and structural analysis of chemical substances.
Prerequisite: Chemistry 2420, 3340 (or 4465 and permission of instructor).

4336-5336  Methods of Techniques of Physical Science. (2-4) This course includes methods of instruction and laboratory techniques of topics recommended by the Texas Education Agency to be included in a physical science course in public schools. See Physics 4336-5336.
4337-5337 Methods and Techniques of Physical Science. (2-4) This course includes methods of instruction and laboratory techniques of topics recommended by the Texas Education Agency to be included in a physical science course in public schools. See Physics 4337-5337.

4345-5345 Chemical Bonding and Structure. (3-0) A study of modern theories of chemical bonding in both organic and inorganic systems. Topics include both valence bond and molecular orbital approaches. Huckel molecular orbital theory and ligand field theory are included.
Prerequisite: Chemistry 3340.

4352-5352 Chemical Engineering. (3-0) Course compares roles of the chemical engineer and chemist, contrasts engineering units and metric units, and covers dimensional analysis, steady state material balance and principles of energy conservation. (F)
Prerequisite: Chemistry 3340, 3410, and Physics 1420 or 2420.

4375-5375 Biochemistry. (3-0) A course devoted to a study of the chemistry of carbohydrates, lipids, proteins, enzymes, and nucleo-proteins. A study of enzyme kinetics and thermodynamics of coupled reactions is included. (F, SS-I)
Note: Credit for Chemistry 4275 is not required for credit in Chemistry 4375.
Prerequisite: Chemistry 2420, 3340, 3410 or permission of the department.

4385-5385 Biochemistry. (3-0) A study of digestion, absorption, vitamins, intermediary metabolism and respiration. (S, SS-II)
Note: Credit for Chemistry 4275 is not required for credit in Chemistry 4385.
Prerequisite: Chemistry 2420, 4375, and six semester hours of biology or permission of the department.

4412-5412 Analysis and Synthesis of Organic Compounds. (3-4) Lectures and laboratories on the principles and techniques used in identification and synthesis of organic chemicals. Analytical techniques include qualitative, quantitative and spectral methods. (F)
Prerequisite: Chemistry 2420, 3340 (or 4465 with permission of instructor).

4430 Instrumental Analysis. (3-4) The theory and techniques of physio-chemical methods of analysis; principles of spectroscopy, electrochemistry, chromatography, and other recent advances in quantitative analysis.
Prerequisite: Chemistry 3410 and 3340 (or 4465 and permission of instructor).

4440 Advanced Inorganic Chemistry. (3-3) Chemical bonding, coordination compounds, acid-base concepts, and other topics are included along with some descriptive chemistry. Laboratory illustrates a variety of techniques in preparation and characterization of inorganic compounds. (S)
Prerequisite: Chemistry 3340.

4465 Physical Chemistry. (3-3) Course covers thermodynamics, gas laws, solution chemistry, kinetics, absorption spectrophotometry and electrochemistry with application to living systems. This course is primarily for biology majors or chemistry majors taking the Bachelor of Science in Education degree. (S, SS-II)
Note: Chemistry 4465 cannot be counted as an advanced elective nor as a substitute for Chemistry 3330 by chemistry majors who take the Bachelor of Science degree.
Prerequisite: Chemistry 3410 and Mathematics 1315 (or Mathematics 2331).

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.
Department of Mathematics and Computer Science

Robert A. Northcutt, Professor and Chairman
Professors: Chatfield, Crossley, Helton, McEwen
Associate Professors: Akin, Borm, W.H. Carlisle, III, Early, Edgell, Hazlewood, McClung, Pibley,
Assistant Professor: Bandy, W.P. Davis, Doerr, Evans, Ratliff, *Sawey, J.D.
Smith, Wade, M.L. Warshauer
Instructors: Buchanan, B.D. Davis, J.A. Davis, Goss, Gronberg, Hardy, R.C.
Jones, Krause, D.H. Lee, Mauk, Perez, Sellars, Schoyen, H.K. Warshauer, J.B.
White, Zieleinski, Zoraster

Mathematics

For the Bachelor of Arts or the Bachelor of Science degrees, a major in mathematics consists of 36 semester hours which must include: Mathematics 2371, 2372, 3373, 3380, 4307, 4315, 4330, and nine semester hours of advanced mathematics.

If a teaching certificate is desired with the Bachelor of Arts or the Bachelor of Science degrees, Mathematics 3315 and 4304 are required in addition to the courses specified. Mathematics 3315 must be taken before or concurrently with Mathematics 4304, and Mathematics 4304 must be taken before Education 4681 if directed teaching is in mathematics.

A minor in mathematics consists of 21 semester hours of work which includes: Mathematics 2371, 2372, and at least two advanced courses.

A second teaching field in mathematics requires 27 semester hours with 12 hours advanced. (See Chairman of the Department of Mathematics and Computer Science.)

Note:

First semester freshmen who plan to make a major of mathematics, chemistry, or physics or to enroll under the pre-engineering curriculum are advised to earn credit in Mathematics 1315, 1317, and 2363 or to earn credit in Mathematics 1315 and 2317 in the summer session immediately preceding the regular session in which they plan to enroll.

Students who have completed two years of high school algebra with a "B" average may take an examination in Mathematics 1315 and/or 1317. (See Chairman of the Department of Mathematics and Computer Science.)

Computer Science

A major in computer science consists of 37 semester hours, which must include Computer Science 1318, 2308, 2318, 3358, 3408, and at least 18 advanced hours from the mathematics computer science curriculum.

A minor in computer science consists of Computer Science 2308, 2318, 3408, and at least 12 semester hours (nine advanced) from the mathematics computer science curriculum. A second teaching field in computer science consists of Mathematics 1308, 1318, 2308, 4348, 4358, 4368, and six semester hours of electives from the mathematics computer science curriculum of which three must be advanced.

Bachelor of Science Degree
(128 Semester Hours)

Notes:
1. Thirty-six semester hours are required in mathematics and must include 2371, 2372, 3373, 3380, 4307, 4315, 4330, and at least nine semester hours of advanced mathematics.
2. The minor must be completed in biology, chemistry, physics, psychology, or computer science. The student must complete at least one year of science (biology, chemistry, or physics) outside his minor.
3. A certificate is available with this degree, but may require extra hours.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics 1315, *2317, 2371</td>
<td>9-12</td>
<td>Mathematics 2372, 3373, 3380</td>
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<tr>
<td>Minor</td>
<td>8</td>
<td>Minor</td>
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<tr>
<td>English 1310, 1320</td>
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<td>Physical Education activity</td>
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<td>Physical Education activity</td>
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<td>31-34</td>
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<td>33-36</td>
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</table>

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Hours</th>
<th>Senior Year</th>
<th>Hours</th>
</tr>
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<tbody>
<tr>
<td>Mathematics 4315 and two advanced courses</td>
<td>9</td>
<td>Mathematics 4307, 4330, and one advanced course</td>
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<td>6-8</td>
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<tr>
<td>Political Science 2310, 2320</td>
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<td>Electives</td>
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<tr>
<td>Philosophy 3201 (or 1305)</td>
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<tr>
<td>Art, Theatre Arts, or Music 3213 (or 2300)</td>
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<td></td>
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</tr>
<tr>
<td>Science</td>
<td>8</td>
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<td>33-37</td>
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</tbody>
</table>

Note: Normally the student should complete Mathematics 1315 during the summer or take an Advanced Placement Examination.

Note: If a student plans to pursue a Master's degree in mathematics, the advice of the graduate adviser in mathematics should be sought.

Bachelor of Arts Degree
(128 Semester Hours)

Notes:
1. Thirty-six semester hours are required in mathematics and must include 2371, 2372, 3373, 3380, 4307, 4315, 4330, and at least nine semester hours of advanced mathematics.
2. The student must complete at least one year of science (biology, chemistry, or physics) outside his minor.
3. A certificate is available with this degree, but may require extra hours.

*Many students will find it advisable to take Mathematics 1317 and 2363 in lieu of Mathematics 2317.
**Or English 2351 and three hours of literature.
***Or Speech Communication 3351.
Freshman Year | Hours | Sophomore Year | Hours
---|---|---|---
Mathematics 1315, *2317, 2371 | 9 | Mathematics 2372, 3373, 3380 | 9
Minor | 3 | Minor | 3
English 1310, 1320 | 6 | **English (literature) | 6
Science | 8 | Modern Language | 6-8
History 1310, 1320 | 6 | Political Science 2310, 2320 | 6
Physical Education activity | 2 | Physical Education activity | 2
--- | --- | --- | ---
| **34** | | **32-34** |

Junior Year | Hours | Senior Year | Hours
---|---|---|---
Mathematics 4315 and two advanced courses | 9 | Mathematics 4307, 4330 and one advanced course | 9
Minor | 6 | Minor | 9
***Speech Communication 1310 | 3 | Advanced electives | 4-9
Modern Language | 6 | Electives | 9-4
Art, Theatre Arts, or Music 3213 (or 2300) | 2-3 | | **31**
Philosophy 3201 (or 1305) | 2-3 | | 
Electives | 3 | | **31-33**

Note: Normally the student should complete Mathematics 1315 during the summer or take an Advanced Standing Examination.

Note: If a student plans to pursue a Master's degree in mathematics, the advice of the graduate adviser in mathematics should be sought.

Bachelor of Science in Education Degree
(128 Semester Hours; includes Certificate)

Notes:
1. Thirty-six semester hours in mathematics are required.
2. A second teaching field must be completed in which 12 hours are advanced.
3. At least 12 hours are required with two of the following fields to be represented: science, mathematics, or modern language.
4. Computer Science 4358, *Computers in Education*, is recommended as an elective if computer science is not the second teaching field.

**Many students will find it advisable to take Mathematics 1317 and 2363 in lieu of Mathematics 2317.

**Or English 2351 and three hours of literature.

***Or Speech 3351.
### Bachelor of Science Degree

**Major in Computer Science (128 semester hours)**

**Notes:**

1. Thirty-seven semester hours are required in computer science; 25 hours must be advanced.
2. Twelve semester hours are required in mathematics (excluding Mathematics 1311).
3. The minor must be completed in biology, chemistry, geography, mathematics, physics, or psychology. The student must complete at least one year of science (biology, chemistry, or physics) outside his minor.

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<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
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<td>Computer Science 1318, 2308, 2318</td>
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<td>Computer Science 3358, 3408</td>
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<td>Minor</td>
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<tr>
<td>Modern Language</td>
<td>6-8</td>
<td>History 1310, 1320</td>
<td>6</td>
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<tr>
<td>Speech Communication 3351 (or 1310)</td>
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<td>Physical Education activity</td>
<td>2</td>
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<tr>
<th>Junior Year</th>
<th>Hours</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>Computer Science electives</td>
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<td>Computer Science electives</td>
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<td>3-4</td>
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<td>Science</td>
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<td>Electives</td>
<td>3-6</td>
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<tr>
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<td>Electives</td>
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### Courses in Mathematics

**1311 Basic Mathematics**. (3-0) An introductory course to college algebra. This course is designed for students who have graduated from high school with no more than the minimum mathematical requirements.

*Or English 2351 and three hours literature.*
Note: Mathematics 1311 and Speech 1310 are not to be taken in the same semester except for majors in mathematics or speech.

1315 **College Algebra.** (3-0) A course covering the following topics: Functions, linear equations, quadratic equations, word problems, inequalities, logarithms, induction, probability, determinants, and complex numbers.

1317 **Plane Trigonometry.** (3-0) A course in plane trigonometry; trigonometric functions, trigonometric identities, radian measure, graphs of the trigonometric functions, functions of multiple angles, logarithms, right triangles, oblique triangles, inverse trigonometric functions, complex numbers.

1319 **Mathematics for Business and Economics I.** (3-0) Topics from college algebra which apply to business and economics, simple and compound interest, annuities, and applications of linear equations and inequalities.

Prerequisite: Two years of high school algebra with a “B” or better average or Mathematics 1311 or Mathematics 1315.

1329 **Mathematics for Business and Economics II.** (3-0) Sets, non-linear functions and relations, introduction to probability and statistics and selected topics from elementary calculus.

Prerequisite: Mathematics 1319.

2301 **Informal Geometry.** (3-0) A course designed for those who are preparing to teach elementary school mathematics. It will consist of a brief history of geometry, development of the basic concepts, definitions, constructions, measurement and related topics.

Prerequisite: Mathematics 1311 or 1315.

2317 **Pre-Calculus.** (3-0) A study of elementary functions, elements of trigonometry, and analytic geometry and introduction to limits in preparation for the calculus.

Prerequisite: Two years of high school algebra and high school trigonometry with a “B” or better average or consent of the chairman.

2321 **Mathematics for Life Sciences I.** (3-0) This course is designed to serve the needs of students in the life sciences. Topics will include: graphs, derivatives, exponents and logarithms, scientific notation, sequences, summation, and applications.

Prerequisite: Mathematics 1315.

2328 **Non-Mathematical Statistics.** (3-0) Non-mathematical introduction to random sampling; mean: variance, statistical inference; testing hypothesis and regression analysis. See Computer Science 2328.

Prerequisite: Mathematics 1315.

2331 **Mathematics for Life Science II.** (3-0) Extension of Mathematics 2321. Topics will include: trigonometric functions, probability, integral calculus, differential equations, and applications.

Prerequisite: Mathematics 2321.

2363 **Analytic Geometry:** (3-0) Analytic geometry of two dimensions, loci, the straight line, the circle, conics, tangents, transformation of coordinate, parametric equations and polar coordinates.

Prerequisite: Mathematics 1315 and 1317 or 1315 with a grade of “B” or better and high school trigonometry with a grade of “B” or better.

2371, 2372 **Differential and Integral Calculus.** (3-0) A first course in differential and integral calculus, which stresses limits as well as the applications of the calculus to the problems of science.

Prerequisite: Mathematics 2317 or 2363 or consent of the Chairman for students of exceptional ability.

3305 **Introduction to Probability and Statistics.** (3-0) Basic probability models, generating functions and conditional probability, also discrete and continuous, univariate and bivariate distributions of random variables. Concepts of estimation, tests of hypothesis and statistical inference. See Computer Science 3305.
Prerequisite: Six semester hours of calculus.

3315 Modern Geometry. (3-0) Modern geometry with emphasis on the triangle and the circle. All students who expect to teach high school mathematics should enroll for the course. This course can be used only as a certificate requirement.

3323 Differential equations. (3-0) The more common types of ordinary differential equations, especially those of the first and second orders, with emphasis on geometrical interpretations, and applications to geometry, elementary mechanics, and physics.
Prerequisite: Six semester hours of calculus.

3325 Number Systems. (3-0) Algebraic construction of the natural numbers. Covers the basic vocabulary and proof techniques of abstract algebra, and the structural properties of the natural numbers, integers, rational real and complex number systems.
Prerequisite: Credit or concurrent registration for Mathematics 2371.

3330 Introduction to Topology. (3-0) An introduction to the theory of sets, relations, functions, finite and infinite sets, and other selected topics. Algebraic structure and topological properties of Euclidean Space, and an introduction to metric spaces.
Prerequisite: Mathematics 2371.

3348 Operations Research. (3-0) Provides a broad view of operations research field. Covers elementary operations research techniques such as production and inventory control, linear programming, queueing theory, and game theory. See Computer Science 3348.

3373 Multivariable Calculus. (3-0) Topics will include: sequences and series, vectors, functions of several variables, partial derivatives, multiple integrals, line and surface integrals, applications.
Prerequisite: Mathematics 2372.

3375 Engineering Mechanics. (3-0) A course in statics designed to satisfy the requirements of engineering schools. The vector approach to mechanics is employed.
Prerequisite: Physics 1410 or 1430 and credit or concurrent registration in Mathematics 2372.

3377 Topics in Linear Algebra. (3-0) An introductory course in linear algebra covering vector spaces, linear transformation, matrices, systems of linear equations, and inner product spaces.
Prerequisite: Mathematics 2372.

3380 Advanced Calculus. (3-0) Real functions, limits, continuity, derivatives, an associated topics. Students are required to prove theorems and to understand proofs of theorems.
Prerequisite: Mathematics 2372.

3428 Introduction to Numerical Analysis With Computer Applications. (3-0) Basic numerical methods for function evaluation; root finding; interpolation; numerical differentiation; and numerical integration. See Computer Science 3428.
Prerequisite: Six semester hours of calculus.

4301 Theory of Numbers. (3-0) A first course in the theory of numbers covering the following general topics: divisibility, congruences, quadratic reciprocity, number theoretic functions; diophantine equations, simple continued fractions, and elementary remarks on the distribution of primes.
Prerequisite: Credit or concurrent registration in Mathematics 3380 or consent of instructor.

4302 Materials and Methods in Arithmetic for Elementary Teachers. (3-0) Topics in arithmetic, primarily for those preparing to teach arithmetic in the
elementary grades; beginning number concepts and counting and problem solving. This course can be used only as a certificate requirement.

Prerequisite: Senior standing.

4304 Mathematical Understandings. (3-0) Number bases; basic concepts underlying algebra, geometry, and trigonometry. Must be taken before student teaching and can be used only as a certificate requirement.

Prerequisite: Mathematics 2372, and prerequisite or paralleled, 3315.

4305 Probability and Statistics. (3-0) Basic concepts of probability such as sample spaces, probability of events, conditional probabilities, binomial and multinomial distributions, random variables and normal approximations, and statistical inference, with practical applications. See Computer Science 4305.

Prerequisite: Six semester hours of calculus.

4306 Fourier Series and Boundary Value Problems. (3-0) Advanced solution methods for differential equations; partial differential equations; series approximations, Fourier series; boundary value problems typical of scientific applications.

Prerequisite: Mathematics 3323.

4307 Introduction to Modern Algebra. (3-0) Elementary notions of sets, algebraic structures and functions; viewpoints, basic concepts and techniques of modern (abstract) algebra.

Prerequisite: Credit or concurrent registration in Mathematics 3380 or consent of instructor.

4309 Theory of Matrices. (3-0) Theory and applications of matrices and determinants; matrix algebra, solutions of systems of equations by matrix methods, eigenvalues and eigenvectors, the Cayley-Hamilton Theorem, matrix calculus, and applications with emphasis on linear differential equations.

Prerequisite: Six semesters hours of advanced courses in mathematics or consent of instructor.

4315 Advanced Calculus. (3-0) Study of Riemann-Stieltjes integrals sequences and series of functions, power series, and associated topics. Students are required to prove theorems and to understand the proofs of theorems. Basic for students who do further work in mathematical analysis.

Prerequisite: Mathematics 3380.

4330 General Topology. (3-0) Topics include introductory treatment of convergence, continuity, compactness, connectedness and fixed points in topological spaces with special emphasis on metric spaces.

Prerequisite: Credit or concurrent registration in Mathematics 3380 or consent of instructor.

*4336 Undergraduate Topics in Applied Mathematics. (3-0) Topics selected from the Laplace transform, functions of a complex variable, advanced calculus for applications, calculus of variations, integral equations, intermediate differential equations, and vector analysis.

Prerequisite: Mathematics 3373.

4338 Mathematical Modeling. (3-0) This course is intended to acquaint students with the techniques used in the building and analysis of mathematical models. Situations will be covered from a wide variety of fields such as the physical sciences, engineering, and economics. See Computer Science 4338.

Prerequisite: Six hours of calculus.

*4372 Topics in Mathematics Education. (3-0) A study of individual problems related to the area of elementary school mathematics. This course can be used only as a certificate requirement or as a free elective.

*May be repeated once for credit.

*May be repeated once with different emphasis for additional credit.
Courses in Computer Science

The Computer Science curriculum is designed to prepare students for careers in industry or graduate work through instruction in the theory of computing and computing machinery, organization of computer systems, scientific and statistical applications, and operating system design and development. The curriculum also supports a public school teacher certification program as well as graduate studies leading to the Master of Arts and Master of Science degrees at Southwest Texas State University. The curriculum supports, and is supported by, the sciences.

1308 Computers and Society. (3-0) A study of the cultural impact, history, and use of computers; algorithms flow charts; number systems, punch card operation; introduction to a procedure-oriented language with general applications.

1318 Fundamentals of Computer Mathematics and Flowcharting. (3-0) A basic course covering logical operation and organization for a digital computer, development of basic algorithms, boolean algebra, symbolic logic, and flowcharting techniques.

2308 FORTRAN Programming. (3-0) Logical basis of a digital computer system; machine representation of numbers and characters; flow of control; arithmetic and logical operations, machine control, input-output, basic number codes and programming.

Prerequisite: Mathematics 1315 or Computer Science 1318.

2318 Assembly Language. (3-0) Organization and operation of digital computers. Assembly language programming including such topics as addressing, looping, logic, shifting and masking operations, macros, subroutines, co-routines, arithmetic algorithms, recursion, and input-output programming.

Prerequisite: Computer Science 2308 or consent of instructor.

2328 Non-Mathematical Statistics. (3-0) Non-mathematical introduction to random sampling, mean, variance, statistical inference, testing hypothesis and regression analysis. See Mathematics 2328.

Prerequisite: Mathematics 1315.

3305 Introduction to Probability and Statistics. (3-0) Basic probability models, generating functions and conditional probability. Also discrete and continuous, univariate and bivariate distributions of random variables. Concepts of estimation, tests of hypothesis and statistical inference. See Mathematics 3305.

Prerequisite: Six semester hours of calculus.

3318 Computer Applications to Statistical Methods. (3-0) Variance analysis; correlations; linear regression and curve fitting. Usage of various existing statistical software packages including proper use, limitations and interpretation of tests of hypotheses, correlation and regression analysis.

Prerequisite: Computer Science 2308 and three hours of statistics.

3348 Operations Research. (3-0) Provides a broad view of operations research field. Develops elementary operations research techniques such as production and inventory control, linear programming, queueing theory, and game theory. See Mathematics 3348.

3358 Data Structures. (3-0) A study of data structures and file handling techniques in a high level language.

Prerequisite: Computer Science 3408 or consent of instructor.

3368 Small Scale Computer Systems. (3-0) A study of the architecture of mini- and micro-computers, their peripherals, languages, and operating systems, and the special techniques required to use them.

Prerequisite: Computer Science 3408 or consent of instructor.
3378 Theory of Sequential Machines. (3-0) An introduction to automata, computability, and formal languages.
Prerequisite: Computer Science 2318 and consent of instructor.

3408 Introduction to Computer Architecture. (3-2) Architecture of small and large computing systems. An emphasis on the functional aspects of digital circuits is supplemented by the laboratory.
Prerequisite: Credit for or concurrent registration in Computer Science 2318.

3428 Introduction to Numerical Analysis With Computer Applications. (3-2) Basic numerical methods for function evaluation; root finding; interpolation; numerical differentiation; and numerical integration. See Mathematics 3428.
Prerequisite: Six semester hours of calculus.

4305 Probability and Statistics. (3-0) Basic concepts of probability such as sample spaces, probability of events, conditional probabilities, binomial and multinomial distributions, random variables and normal approximations, and statistical inference with practical applications. See Mathematics 4305.
Prerequisite: Six semester hours of calculus.

4318 System Programming I. (3-0) A study of computer languages, data structures, and algorithms used in constructing assemblers and compilers.
Prerequisite: Computer Science 2318 and 3358.

4328 System Programming II. (3-0) Theory and practices with compilers and operating systems, development and applications of systems software for specific computer systems.
Prerequisite: Computer Science 4318.

4338 Mathematical Modeling. (3-0) This course is intended to acquaint students with the techniques used in the building and analysis of mathematical models. Situations will be covered from a wide variety of fields such as the physical sciences, engineering, and economics. See Mathematics 4338.
Prerequisite: Six hours of calculus.

4348 Programming for Teachers. (3-0) A comprehensive introduction to the BASIC programming language and the fundamental principles of problem solving via the digital computer. Instruction and use of teletypes. The role of the computer in the secondary school will be an integral concern throughout the course. This course can be used only as a certificate requirement.

4358 Computers in Education. (3-0) An introduction to computers in education, involving some programming in the BASIC computer language; methods for computer usage on the secondary school in the areas of mathematics, science and business; survey of administrative uses of the computer. This course can be used only as a certificate requirement.

4368 Survey of Computer Languages. (3-0) Differences in language implementations and structures caused by differing program goals are examined by surveying languages such as ALGOL, SNOBOL, APL, LISP, RPG, and others.
Prerequisite: Computer Science 2308 or consent of instructor.

*4378 Advanced Applications in Computer Science. (3-0) Independent computer programming and research. Topics in areas such as criminal justice or allied health or research projects closely related to existing industrial problems.
Prerequisite: Approval of instructor and computer science adviser.

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.

*May be repeated once with different emphasis for additional credit.
Department of Physics

Victor E. Michalk, Professor and Chairman
Professor: R. E. Anderson, Crawford
Associate Professors: Jackson, Spear

Bachelor of Science Degree
(128 semester hours)

Notes:

1. A major in physics consists of 36 semester hours represented by Physics 1430, 2310, 2420, 3312, 3314, 3320, 3411, 4310, 4311, 4312, and one additional advanced course.

2. Six additional hours of physics (electives) may be applied to the degree above those required for the major.

*3. The student planning to major in physics is strongly advised to complete the mathematics 1315, 1317 requirements during the summer session prior to the Fall semester of his freshman year. Failure to do so will put him out of sequence, and the requirements must be met before enrolling in Physics 1430.

4. A minor in physics consists of 24 semester hours represented by Physics 1430, 2310, 2420, 3312, 3314, 3411, and one additional advanced course. A second teaching field consists of 24 semester hours, 12 of which must be advanced.

5. The minor must be completed in biology, chemistry, computer science, or mathematics.

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<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
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<td>Physics 1430</td>
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<td>Physics 2310, 2420, 3312</td>
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<td>*Mathematics 2363, 2371</td>
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<td>Mathematics 2372, 3323</td>
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<td>English 1310, 1320</td>
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<td>**English 2351 and three hours</td>
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<td>Modern Language</td>
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<td>Chemistry or Biology</td>
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</table>
Bachelor of Science in Education Degree  
(128 semester hours; includes certificate) 

Notes:  
1. Thirty-three semester hours in physics are required, represented by Physics 1430, 2310, 2420, 3312, 3314, 3411, 4311, 4312, and two advanced courses.  
2. Six additional hours of physics (electives) may be applied to the degree above those required for the major.  
3. A second teaching field must be completed, in which 12 semester hours are advanced.  
4. The student’s attention is called to the prerequisite for Physics 1430. He is strongly urged to complete the Mathematics 1315, 1317 requirement during the summer session prior to the Fall semester of his freshman year. 

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
<th>Sophomore Year</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Physics 1430</td>
<td>4</td>
<td>Physics 2310, 2420, 3312</td>
<td>10</td>
</tr>
<tr>
<td>*Mathematics 2363, 2371</td>
<td>6</td>
<td>Mathematics 2372, 3323</td>
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<td>English 1310, 1320</td>
<td>6</td>
<td>English (literature)</td>
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<tr>
<td>Speech Communication 1310</td>
<td>3</td>
<td>Chemistry or Biology</td>
<td>7-8</td>
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<tr>
<td>History 1310, 1320</td>
<td>6</td>
<td>Physical Education activity</td>
<td>2</td>
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<td>Elective</td>
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<tr>
<td>Physical Education activity</td>
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<tr>
<th>Junior Year</th>
<th>Hours</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>Physics 3314, 3411, 4311 and 3 hours advanced</td>
<td>13</td>
<td>Physics (advanced)</td>
<td>6</td>
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<tr>
<td>Political Science 2310, 2320</td>
<td>6</td>
<td>Education 4331, 4332, 4681</td>
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<tr>
<td>Education 3312, 3330</td>
<td>6</td>
<td>Second teaching field and electives</td>
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<tr>
<td>Philosophy 3201 (or 1305)</td>
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<td>31</td>
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<td>Art, Theatre Arts, or Music</td>
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<tr>
<td>3213 (or 2300)</td>
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Bachelor of Arts Degree 
(128 semester hours) 

Notes:  
1. The Bachelor of Arts degree is recommended for students needing a physics background, but planning to pursue professional fields other than physics as a life’s work.  
2. A major in physics consists of 27 semester hours represented by Physics 1410, 1420, 2310, 3411, and 12 additional hours of advanced work.  
3. A minor may be chosen in any field of interest.
### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Mathematics 1315, 2321</td>
<td>6</td>
</tr>
<tr>
<td>English 1310, 1320</td>
<td>6</td>
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<tr>
<td>History 1310, 1320</td>
<td>6</td>
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<tr>
<td>Speech Communication 1310</td>
<td>3</td>
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<tr>
<td>Physics 1410</td>
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<td>Physical Education activity</td>
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<td>Electives</td>
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### Sophomore Year

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Computer Science 2308</td>
<td>3</td>
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<tr>
<td>Mathematics 2331</td>
<td>3</td>
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<tr>
<td>Physics 1420, 2310</td>
<td>7</td>
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<tr>
<td>English 2351, three semester</td>
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<tr>
<td>Computer literature</td>
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<tr>
<td>Political Science 2310, 2320</td>
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<td>Physical Education activity</td>
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<td><strong>Total</strong></td>
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### Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Physics 3411, six semester</td>
<td>10</td>
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<tr>
<td>hours advanced</td>
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<tr>
<td>Minor</td>
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<tr>
<td>Modern Language</td>
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<tr>
<td>Philosophy 3201 (or 1305)</td>
<td>2-3</td>
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<tr>
<td>Electives (three semester)</td>
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<tr>
<td>hours advanced</td>
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<td><strong>Total</strong></td>
<td><strong>32-33</strong></td>
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### Senior Year

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Physics (advanced)</td>
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<td>Modern Language</td>
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<td>Art, Theatre Arts, or Music</td>
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<tr>
<td>3213 (or 2300)</td>
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<tr>
<td>Electives (advanced)</td>
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<td><strong>Total</strong></td>
<td><strong>31-32</strong></td>
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#### Courses in Physics

**1140 Introductory Laboratory in Astronomy.** (0-2) An introduction to the use of telescopes, photography, and spectroscopy in the study of the constellations, stars and planets. This course is designed to be taken with Physics 1340, for those students desiring a laboratory course.

Physics 1310 and 1320 are designed for the liberal arts student. They are not recommended for pre-engineering students or majors and minors in science.

**1310 Elementary Physics.** (3-1) A non-mathematical survey of mechanics, properties of matter, heat and sound. These topics are described in a conceptual way with applications relating to the world around us.

**1320 Elementary Physics.** (3-1) A non-mathematical survey of electricity, magnetism, light, relativity, and atomic and nuclear physics. These topics are described in a conceptual way with applications relating to the world around us.

Physics 1313 and 1314 are designed for those students whose curricula require physical science. They are not recommended for pre-engineering students or majors and minors in science.

**1313 Physical Science.** (3-1) Physical science for the non-science major. The emphasis is placed upon the concepts of physics and chemistry rather than the mathematical relationship.

**1314 Physical Science.** (3-1) Physical science for the non-science major. The emphasis is placed upon the concepts of physics and chemistry rather than the mathematical relationship. Concepts of astronomy and astronautics are also included.

**1315 Physics for the Health Sciences.** (3-1) Physics for students in the Allied Health Sciences with emphasis in the areas of gas laws and fluid flow, electricity, light, and modern physics.

Prerequisite: Major in respiratory therapy, or approval of the instructor.

**1340 Introduction to Astronomy.** (3-0) A study of the solar system to include all the planets and their satellites. Constellations, stars, and galaxies will be
studied with the aim of giving the student a greater appreciation and knowledge of the universe.

Physics 1410 and 1420 are designed for those students whose program requires technical physics, but who are not pre-engineering students or majors and minors in physics.

1410, 1420 General Physics. (3-3) Physics 1410 includes a study of mechanics and heat; Physics 1420 is a study of magnetism, electricity, sound and light.
Prerequisite: Registration or credit in Mathematics 1315 and 1317 (or 2321)

Physics 1430 and 2420 are designed for those students majoring or minoring in physics and for pre-engineering students.

1430 Mechanics and Heat. (3-3) The fields of mechanics and heat at a beginning level for physics majors and minors.
Prerequisite: Mathematics 2371 to be taken concurrently or previously. Credit in both Physics 1410 and 1430 cannot be given.

2310 Introduction to Mathematical Physics, Part I. (3-0) An introduction to specific mathematical topics as applied to standard classical problems in physics.
Prerequisite: Mathematics 2372 and two semesters of physics.

2420 Wave Motion, Electricity, Magnetism and Light. (3-3) A study of the fields of wave motion, electricity, magnetism and light at a beginning level for physics majors and minors.
Prerequisite: Mathematics 2371 and Physics 1430. Credit in both Physics 1420 and 2420 cannot be given.

3312 Modern Physics, Part I. (3-0) An introduction to the foundations of modern physics, including the following topics: Relativistic Mechanics; Kinetic Theory of Matter; Quantization of Electricity; Light and Energy; the Atom; Wave Nature of Particles; and the Schroedinger Equation.
Prerequisite: Mathematics 2372 and Physics 2420.

3314 Mechanics. (3-0) Fundamentals of classical mechanics, including systems of particles, rigid bodies, and moving coordinate systems.
Prerequisite: 2420 and Mathematics 3323.

3315 Thermodynamics. (3-0) The fundamental study of thermodynamics and statistical mechanics.
Prerequisite: Physics 2420 and Mathematics 3323.

3316 Electricity and Electronics. (3-3) Electric and electronic circuits, including complex number treatment of ac circuits, impedance matching, resonance phenomena, amplifiers, feedback circuits, and special trigger circuits.
Prerequisite: Physics 2420 and Mathematics 2372.

3317 Optics. (3-0) A study of geometrical and physical optics.
Prerequisite: Physics 2420 and Mathematics 2372.

3320 Introduction to Mathematical Physics, Part II. (3-0) An introduction to the mathematical methods of theoretical physics with emphasis on the vector-functional approach emphasized in current research literature. Applications will be made to certain fundamental problems of mechanics and electromagnetic field theory.
Prerequisite: Physics 2310 and Mathematics 3323.

3321 Geophysics. (3-0) Fundamentals of geophysics. Instrumentation and methods used on geophysical exploration will be covered.

3411 Advanced Physics Laboratory. (2-6) Experiments in modern physics, with emphasis on demonstrating quantum effects and introducing nuclear physics.
Prerequisite: Physics 3312.
*4120 Selected Topics in Laboratory Physics. (0-3) Experiments and experimental techniques in topics of current interest in physics with the specific topic to be agreed upon prior to registration.
   Prerequisite: Approval of the instructor.

*4265 Undergraduate Research. (0-4) This course is available to undergraduate students only upon the invitation of the department.

4310 Electromagnetic Field Theory. (3-0) An introduction to the electromagnetic field theory of classical physics. Topics included will be the electrostatic field, magnetic field of steady currents, electromagnetic induction, and magnetic properties of matter.
   Prerequisite: Physics 3320 (or equivalent preparation, with consent of the instructor).

4311 Modern Physics, Part II. (3-0) An introduction to quantum mechanics with application in atomic structure, solid state, and nuclear physics.
   Prerequisite: Physics 2310 and 3312.

   Prerequisite: Mathematics 3323 and 12 hours of advanced physics.

4313 Advanced Dynamics, Part I. (3-0) An introduction to classical mechanics at an advanced level.
   Prerequisite: Physics 3320, or approval of the instructor.

*4320 Selected Topics in Advanced Physics. (3-0) Topics are chosen in theoretical and experimental areas of current interest in physics with specific topic to be discussed agreed upon prior to registration.
   Prerequisite: Approval of the instructor.

4323 Introduction to Holography. (2-3) An introduction to lasers and holography. Laboratory will provide an opportunity for learning basic holographic techniques and pursuit of individual projects in areas such as art and scientific applications.
   Prerequisite: Approval of the instructor.

4335-5335 Survey of Air Pollution Problems. (3-0) A survey in air pollution problems covering particulate and gaseous contaminants. The sources, natural cleansing mechanisms, effects, and measurement procedures for contaminants will be studied. Also included will be the efforts at control by industry and federal and state regulatory agencies.
   Prerequisite: Two semesters of physics, or approval of the instructor.

Interdepartmental Courses

4336-5336 Methods and Techniques of Physical Science. (2-4) This course includes methods of instruction and laboratory techniques of topics recommended by the Texas Education Agency to be included in a physical science course in public schools. See Chemistry 4336-5336.

4337-5337 Methods and Techniques of Physical Science. (2-4) This course includes methods of instructions and laboratory techniques of topics recommended by the Texas Education Agency to be included in a physical science course in public schools. See Chemistry 4337-5337

For course descriptions, and further information about available graduate offerings, please consult the Graduate School Bulletin.

*Course may be repeated for additional credit providing a different topic is to be covered.
1979-80 Faculty

Abel, Burl Michael, Assistant Professor of Agriculture.
B.S., D.V.M., Texas A&M University; M.S., Iowa State University.

Abney, Armando James, Instructor in Sociology.
B.A., M.A., Sam Houston State University.

Abrahamson, Royce Lynnwood, Professor of Management.
B.S. in Ed., M.Ed., Ph.D., The University of Texas at Austin.

Adams, Dorothy Elaine, Instructor in Art.
B.A., The University of Texas at Austin; M.Ed., College of William and Mary.

Albin, William Carroll, Associate Professor of Mathematics.
B.S. in Ed., M.Ed., Southwest Texas State University; A.M., University of Illinois.

Albrecht, Katherine Montgomery, Instructor in Home Economics.
B.A. in Ed., University of Southerwestern Louisiana; M.S., University of Tennessee.

Alexander, Judith Caldwell, Assistant Professor of English.
B.A., University of Texas at Arlington; M.A., North Texas State University; Ph.D., University of Arizona.

Alexander, Mary Louise, Professor of Biology.
B.A., M.A., Ph.D., The University of Texas at Austin.

Allen, Judy Little, Assistant Professor of Home Economics.
B.S. in H.E., Southwest Texas State University; M.S. in H.E., University of Missouri at Columbia; Ph.D., Texas Tech University.

Allen, Tom Ray, Instructor in Home Economics.
B.A.T., M.F.A., Sam Houston State University.

Amon, Iris Williford B., Instructor in History
B.S. Campbell College; M.A. Southwest Texas State University.

Anderson, Craig C., Instructor in Art.
B.F.A., Hamline University; M.F.A., University of Colorado at Boulder.

Anderson, Rachel Ann, Assistant Professor in Home Economics.
B.S., M.S., East Texas State University; Ed.D., Oklahoma State University.

Anderson, Robert Ernest, Professor of Physics.
B.S., M.S., Texas A&I University; Ph.D., The University of Texas at Austin.

Anderson, William Eugene, Lecturer in Journalism
B.A., The University of Texas at Austin.

Anderson, William Woodrow, Professor of History.
B.A., Baylor University; M.A., Ph.D., The University of Texas at Austin.

Aron, Benjamin Francis, Assistant Professor of English.
B.A., M.A.T., Indiana University

Balanoff, Howard Richard, Assistant Professor of Political Science.

Ballard, John Roger, Professor of Industrial Arts.
B.S., M.A., Southwest Texas State University; Ed.D., Texas A&M University.

Baergen, John Darrel, Professor of Speech Communication.
A.B., Oklahoma Baptist University; M.A., Baylor University; Ph.D., University of Denver.

Baker, Daniel Gary, Instructor in Health and Physical Education.
B.S. in Ed., M.Ed., Southwest Texas State University.

Ballaboff, Howard Richard, Assistant Professor of Political Science.

Barrett, Patricia Ann, Instructor in Health and Physical Education.
B.A., M.A., San Jose State College.

* Leave of Absence, Fall 1979.
** Faculty Development Leave, Spring, 1980.
Barton, James Gabriel, Professor of Speech Communication.
B.F.A., Nebraska State Teachers College; M.A., University of Michigan.

Bartsch, Friedemann Karl, Assistant Professor of English.
A.B., The University of Rochester; A.M., Ph.D., Indiana University.

Baughn, Jules Rodney, Lecturer in Home Economics.
B.S. in Ed., Ball State University; A.M., University of Michigan.

Bechtol, William Milton, Professor of Education and Chairman of the Department of Education.
B.S. in Ed., M.Ed., Ed.D., Miami University, Ohio.

Beck, John James, Jr., Assistant Professor of Education.
B.S., Southwest Texas State University; B.S., University of Washington; M.A.T., Ph.D., The University of Nebraska.

Becker, Seldon G., Instructor in Industrial Arts.
B.S., M.Ed., University of Houston.

Beichic, Albert Mitchell, Assistant Professor of Health Administration.
B.S., Louisiana State University; J.D., Southern Methodist University; M.S., Trinity University.

Belchle, Albert Lee, Professor of Music.
B.M., Oklahoma City University; M.M.Ed., D.Mus., Indiana University.

Bell, Deanne French, Associate Professor of Allied Health Sciences.
B.S. in Nursing, M.S. in Nursing, Ph.D., The University of Texas at Austin.

Bell, Durward Lynn, Assistant Professor of Allied Health Sciences.
B.A., M.A., California State College at Long Beach; Ph.D., The University of Texas at Austin.

Benjamin, Caroline Pitcher, Assistant Professor of Biology.
B.A., Harpur College, M.A., Ph.D., Indiana University.

Benjamin, James Bruce, Assistant Professor of Speech Communication.
B.S., Dakota State University; M.A., Ph.D., The Pennsylvania State University.

Bennett, Roger Edwin, Associate Professor of Journalism and Chairman of the Department of Journalism.
B.S.J., M.S.J., Ohio University; Ph.D., The University of Texas at Austin.

Bevilaqua, Joseph Peter, Associate Professor of Psychology, Associate Vice President for University Affairs, and Dean of Student Life.
B.S., St. Joseph's University; M.A., M.Ed., Pennsylvania State University; Ed.D., University of Pennsylvania.

Bigby, Phyllis Antonette, Instructor in Health and Physical Education.
B.S., Stephen F. Austin State University; M.S. in Rec., Indiana University.

Bishop, Bill Joe, Professor of Accounting and Chairman of the Department of Accounting and Computer Information Systems.
B.B.A., M.B.A., North Texas State University; Ph.D., The University of Texas at Austin.

Bland, Randall Walton, Professor of Political Science.
B.A., Texas A&M University; M.A., Ph.D., University of Notre Dame.

Blaney, Paul Joseph, Instructor in Criminal Justice.
M.P.A., Illinois Institute of Technology.

Blanka, Patricia J., Instructor in Education.
B.A., Kansas State University; M.A. in C.D., Our Lady of the Lake College.

Blythe, Hal Tucker, Associate Professor of Education.
B.S., M.S.E., State College of Arkansas; Ph.D., East Texas State University.

Boehm, Richard Glen, Professor of Geography and Chairman of the Department of Geography and Planning.
B.S. in Ed., A.M., University of Missouri; Ph.D., The University of Texas at Austin.

Bohls, Kirk Ray, Lecturer in Journalism.
B.J., The University of Texas at Austin.

Boiling, Julie Ruth, Instructor in Home Economics.
B.S., M.S., Louisiana State University.

Bomer, Ronald Louis, Instructor in Criminal Justice.
B.S. in L.E., Southwest Texas State University; M.Ed., The University of Texas at Austin.

Bonds, Diane Stockmar, Assistant Professor of English.
A.B., Goucher College; M.A., University of Richmond; Ph.D., Bryn Mawr College.

Borm, Alfred Erwin, Associate Professor of Mathematics.
B.S., The University of Texas at Austin; M.A., University of Washington; Ph.D., The University of Texas at Austin.

Boswell, Ira Renay, Professor of Music.
Bradford, Debra Ann, Lecturer in Allied Health Sciences.
A.A.S., B.S.H.P., Southwest Texas State University.

Braffett, Joe Max, Assistant Professor of English.
B.A., M.A., University of Oklahoma.

Brasher, Thomas Lowber, Professor of English.
B.A., M.A., Hardin-Simmons University; Ph.D., Louisiana State University.

Brennen, E. Ardella, Associate Professor of Sociology-Anthropology (Institute of Social Work).
B.S., Texas Woman's University; M.S., Texas A&M University; M.S.W., The University of Texas at Austin.

Bresie, Loris Lynn, Instructor in Health and Physical Education and Supervisor of Student Teaching.
B.S., McNeese State University; M.A., Sam Houston State University.

Brion, Alton Gerhardt, Associate Professor of History.
B.A., M.A., Texas College of Arts and Industries.

Brianza, William Michael, Instructor in History.
B.A., North Texas State University; M.Ed., Southwest Texas State University.

Brislet, Louis Edwin, Professor of German.
B.A., Mississippi State University; M.A., Ph.D., The University of Texas at Austin.

Brittain, Vicki Sue, Lecturer in Political Science.
B.A., Southwestern College; J.D., Washburn University.

Brooks, Alta Rae, Associate Professor of Special Education and Supervisor of Student Teaching.
B.A., M.A., University of Kansas; Ph.D., University of Wisconsin.

Brown, Dorothy H., Assistant Professor of Education.
B.S. in Ed., M.A., Ph.D., The Ohio State University.

Brown, Judith Hardin, Instructor in Education.
B.S., Butler University; M.Ed., University of Illinois.

B.A., Southwestern University; M.S.S.W., The University of Tennessee.

Brown, Karl William, Instructor in Religion.
B.S., The University of Texas at Austin; M.Th., Southern Methodist University (Perkins School of Theology).

Brown, Ronald Condlin, Assistant Professor of History.
B.A., Wabash College; A.M., Ph.D., University of Illinois.

Brown, William Frank, Professor of Education.
B.S., Trinity University; M.A., Ed.D., The University of Texas at Austin.

Bruna, June Katherine, Instructor in Health and Physical Education.
B.A., Coe College; M.A., Texas Woman's University.

Brunner, Peggy Gregory, Assistant Professor of Music.
B.M., M.M., The University of Texas at Austin.

Brunson, Billy Ray, Professor of History.
B.A., M.A., Ph.D., Texas Tech University.

Brunson, Martha Luan, Professor of English and Chairman of the Department of English.
B.S., Northwestern University; M.A., Ph.D., Texas Tech University.

Bryant, Milton Robert, Assistant Professor of General Business and Acting Chairman of the Department of General Business.
B.S., Florida Southern College; M.Eng., Ph.D., Texas A&M University.

Buchanan, Virginia Matthews, Instructor in Mathematics.
B.S., Delta State University; M.S., Ph.D., University of Mississippi.

Buckley, Frank Wilson, Professor of Journalism.
B.A., Louisiana College; L.L.B., Vanderbilt University; M.A., Florida State University; Ph.D., Southern Illinois University.

Bynum, James Lowell, Associate Professor of Education.
B.S., McMurry College; M.Ed., West Texas State University; Ed.D., Texas Tech University.

Calbeek, Franklin A., Professor of Health and Physical Education and Supervisor of Student Teaching.
B.S., Augustana College; M.S., University of Illinois; Ed.D., University of Oregon.

Campbell, Cynthia Ann, Instructor in Special Education.
B.S. in Ed., M. Ed., Southwest Texas State University.

Caputo, Joseph Anthony, Professor of Chemistry and Vice President for Academic Affairs.
B.S., M.S., Seton Hall University; Ph.D., University of Houston.

* Faculty Development Leave, Fall, 1980.
** Faculty Development Leave, Spring, 1980.
Carlsle, Charles Richard, Associate Professor of Modern Languages and Chairman of the Department of Modern Languages.
B.A., M.A., Ph.D., University of Arizona.

Carlsle, Washington Homer III, Associate Professor of Mathematics.
B.A., M.A., Ph.D., Emory University.

Carman, Douglas Gary, Associate Professor of Economics.
B.B.A., M.A., Ph.D., Southern Methodist University.

Carson, Charles Dee, Assistant Professor of Agriculture.
B.S., M.S., Ph.D., Texas A&M University.

Carter, John Richard, Lecturer in Aerospace Studies.
B.B.A., Southwest Texas State University.

Carter, Robert Newton, Associate Professor of Marketing.

Caruana, Louis B., Assistant Professor of Allied Health Sciences.
B.S., M.S., Midwestern State University.

Cassidy, Patrick Edward, Professor of Chemistry.
B.S., University of Illinois; M.S., Ph.D., University of Iowa.

Cate, Reynolds Newman, Jr., Instructor in General Business.
B.A., J.D., The University of Texas at Austin.

Champagne, Gerald Bernard, Associate Professor of Agriculture.
B.S., The University of Southwestern Louisiana; M.S., Louisiana State University.

Champion, James Joseph, Associate Professor of Modern Languages.
B.S., Michigan State University; M.A., Ph.D., University of Michigan.

Chapman, Beth Lynette, Instructor in Accounting.
B.B.A., M.B.A., Southwest Texas State University.

Chatfield, John Albert, Professor of Mathematics.
B.S., M.S., Southwest Texas State University; Ph.D., The University of Texas at Austin.

Chavin, Allan Richard, Assistant Professor of English.
B.A., Dickinson College; A.M., Ph.D., University of Illinois.

Cheatham, Thomas Richard, Professor of Speech Communication and Chairman of the Department of Speech Communication and Theatre Arts.
B.A., Wayland College; M.A., Ph.D., Purdue University.

Cheselka, Paul, Instructor in Modern Languages.
B.A., Montclair State College; M.A., Middlebury College.

Chesney, Michael Thomas, Instructor in Economics.
B.S., The University of Texas at Austin; M.B.A., Ohio State University; Ph.D., The University of Texas at Austin.

Chiodo, Beverly Ann, Assistant Professor of General Business and Supervisor of Student Teaching.
B.B.A., Baylor University; M.B.A., Texas Tech University; Ph.D., Texas A & M University.

Chisum, Karen Alice, Instructor in Health and Physical Education and Supervisor of Student Teaching.
B.S. in Ed., M.Ed., Southwest Texas State University.

Clark, Deborah Bryant, Lecturer in Allied Health Sciences.
B.S., Southwest Texas State University.

Clayton, Charles Edward, Assistant Professor of History and Supervisor of Student Teaching.
B.A., M.Ed., Southwest Texas State University.

Clifford, John E., Professor of Theatre Arts and Director of Theatre.
B.S.S., John Carroll University; M.A., St. Louis University; Ph.D., Michigan State University.

Clonts, Jean Griffith, Assistant Professor of Allied Health Sciences.
B.S. in Nursing, Elizabethtown College; M.S. in H.P., Southwest Texas State University.

Cogdill, Alvin Benson, Assistant Professor of Education.
B.S., Texas A&M University; M.Ed., The University of Houston.

Cole, Margaret Frances, Assistant Professor of Education.

Coleman, Suzanne, Instructor in Political Science.
B.A., Texas Christian University; M.A., The University of Texas at Arlington.

Collins, Leah Jean, Instructor in Health and Physical Education.
B.S., Texas A&M University; M.A., Michigan State University.

Compton, Ross Davis, Associate Professor of Chemistry.
B.S., M.S., North Texas State University; Ph.D., The University of Texas at Austin.
Conley, Francis Albert, Associate Professor of Health Administration.
   B.A., The University of Texas at Austin; D.D.S., Baylor University; M.S., Southwest Texas State University.

Conner, John Avery, Jr., Lecturer in Health and Physical Education.
   B.S., Southwest Texas State University; M.S., North Texas State University.

Conoley, Colleen Wyan, Professor of Education.
   B.A., The University of Texas at Austin; D.D.S., Baylor University; M.S., Southwest Texas State University.

Conner, John Avery, Jr., lecturer in Health and Physical Education.
   B.S., Southwest Texas State University; M.S., North Texas State University.

Core, Herman Edward, Associate Professor of Political Science.
   B.S. in C.E., B.S. in A.E., The University of Texas at Austin; J.D., Law School of Harvard University; M.A., California State University at Chico.

Cook, James Randolph, Associate Professor of Computer Information Systems.
   B.A.A., M.B.A., West Texas State University; D.B.A., Texas Tech University, C.D.P.

Cooper, Paul Dall, Instructor in Industrial Arts.
   B.S. in Ed., Northeast Missouri State College; M.S., Murray State University.

Coulton, J. Peter, Professor of Theatre Arts.
   B.F.A., M.A., University of Arizona; Ph.D., University of Kansas.

Crawford, James Robert, Professor of Physics.
   B.S., Phillips University, M.S., University of Arkansas, Ph.D., Kansas State University.

Croaden, Sterling Gene, Professor of Mathematics and Assistant Vice President for Academic Affairs.
   B.S., Rice University; M.S., Ph.D., Texas Tech University.

Cude, William Augustus, Jr., Associate Professor of Chemistry.
   B.S. in Ch.E., The University of Texas at Austin, M.S., Ohio State University; Ph.D., The University of Texas at Austin.

Czechos, Patricia Ann, Instructor in English.
   B.A., M.A., Southwest Texas State University.

Dacus, W. Pence, Professor of Education and Special Assistant to the President for Development.
   B.S. in Ed., M.Ed., Southwest Texas State University; M.S. in Rel. Edu., Abilene Christian College; Ed.D., University of Houston.

Davis, Bradford Dick, Instructor in Mathematics.
   B.S., Oklahoma College of Liberal Arts; M.S., The University of Tulsa.

Davis, Gary Don, Instructor in Psychology.
   B.A., M.Ed., Southwest Texas State University.

Davis, Jean Ann Foster, Instructor in Mathematics.
   B.A., M.A., The University of Texas at Arlington.

Davis, John Michael, Associate Professor of Psychology.
   B.A., M.A.T., Oklahoma City University; M.S., Ph.D., University of Oklahoma.

Davis, Karen Brickley, Instructor in English.
   B.A., Southwest Texas State University; M.A., Texas A&M University.

Davis, Richard Lee, Associate Professor of Spanish.
   B.A., M.A., Ph.D., The University of Texas at Austin.

Davis, Wilbon Pinkney, Assistant Professor of Computer Science and User Consultant, Computer Services.
   B.S., M.S., Southwest Texas State University.

Dawson, James Michael, Instructor in Health and Physical Education.

Deduck, Patricia Anne, Assistant Professor of English.
   B.A., State University of New York; A.M., Ph.D., Indiana University.

* Faculty Development Leave, Fall (1/2), 1980, Spring (1/2), 1981.
Dibrell, William Henry, Assistant Professor of Speech Communication and Theatre Arts, Supervisor of Student Teaching, and Coordinator of Correspondence. B.A., M.Ed., Southwest Texas State University.

Dochten, Carol Witherspoon, Instructor in Psychology. B.S. in Ed., M.Ed., Southwest Texas State University.

Dorrer, Roy Frederic, Assistant Professor of Mathematics and Supervisor of Student Teaching. B.S. in Ed., Southwest Texas State University; M.A., The University of Texas at Austin.

Dolezal, Charles Henry, Associate Professor of Special Education and Chairman of the Department of Special Education. B.S., M.Ed., Ph.D., The University of Texas at Austin.

Dominguez, Olga Acevedo, Associate Professor of Special Education. B.A., Texas A&M University; M.Ed., Southwest Texas State University.

Dorney, Joyce W., Instructor in Political Science. B.A., M.A., Southwest Texas State University.

Doerr, Roy Frederic, Assistant Professor of Mathematics and Supervisor of Student Teaching. B.S. in Ed., Southwest Texas State University; M.A., The University of Texas at Austin.

Dorney, Oscar Lee, Professor of Education, Associate Vice President for Academic Affairs, and Dean, Public Service, Adult and Continuing Education. A.A., Angelo State University; B.S., Abilene Christian College; M.Ed., Ph.D., Texas A&M University.

Dorneycott, Bill Frank, Associate Professor of Allied Health Sciences. A.A., Southwest Texas State University; B.S., Louisiana State University.

Edwards, Danny Ray, Lecturer in Allied Health Sciences. A.A.S., Southwest Texas State University, B.S., Louisiana State University.

Edwards, King Renee, Assistant Professor of Speech Communication. B.S., Clarion State College; M.A., Auburn University; Ph.D., The Florida State University.

Edwards, Sidney William, Professor of Biology. B.S., M.A., George Peabody College for Teachers; Ph.D., Vanderbilt University.

Edgell, John James, Jr., Associate Professor of Mathematics and Supervisor of Student Teaching. B.S., Lamar State College of Technology; M.A., Sam Houston State University; Ph.D., The University of Texas at Austin.

English, Sallie Bertram, Assistant Professor of Finance. B.S., Texas A&M University; M.B.A., North Texas State University.

Erwin, Paula Sue, Instructor in Art. B.S., M.A., Texas Woman's University.


Eure, Jack Douglas, Jr., Associate Professor of Marketing. B.B.A., M.B.A., North Texas State University; Ph.D., Louisiana State University.

Evans, Kenneth Alvus, Assistant Professor of Mathematics. B.A., East Texas State University; M.A., The University of Texas at Austin.

Fabriker, Mary Kristina, Assistant Professor of English. A.B., Colby College, M.A., Ph.D., Claremont Graduate School.

Fabritius, Michael Manfred, Instructor in Economics. B.A., State University of New York; M.A., New Mexico State University.


Fauquier, David Michael, Associate Professor of Allied Health Sciences. A.A., St. Petersburg Junior College; B.S.M.T., M.Ed., University of Florida.

Fawley, John Walraven, Jr., Assistant Professor of General Business. B.B.A., Texas A&M University; M.B.A., Ohio State University.
Farlow, Daniel Edward, Associate Professor of Political Science.  B.S., M.A., Sam Houston State University.

Farr, Anna Ve, Instructor in Education.  B.S. in Ed., M.Ed., Southwest Texas State University.

Farr, Gerald Gynn, Assistant Professor of Biology.  B.S., M.A. Southwest Texas State University.

Feuge, James Edgar, Assistant Professor of Education.  A.B., The University of Texas at Austin; M.Ed., Southwest Texas State University; Ph.D., The University of Texas at Austin.


Finch, Catherine Howard, Assistant Professor of General Business.  B.B.A., M.Ed., Southwest Texas State University.

Fischer, Robert Allen, Assistant Professor of French.  B.A., M.A., University of Cincinnati; Ph.D., Pennsylvania State University.

Fisher, Margaret Elizabeth, Associate Professor of Home Economics and Chairman of the Department of Home Economics.  B.S., Texas Tech University; M.A., Arizona State University.

Fitch, John William III, Professor of Chemistry.  B.S., Ph.D., The University of Texas at Austin.

Fitch, Suzanne Pullon, Assistant Professor of Speech Communication.  A.B., M.A., University of Michigan.

Fite, Kathleen Elizabeth, Assistant Professor of Education.  B.S., in Ed., M.Ed., Southwest Texas State University; Ed.D., North Texas State University.

FitzPatrick, Merry Kone, Associate Professor of History and Supervisor of Student Teaching.  B.A., M.A., Southwest Texas State University.

Flemming, David George, Assistant Professor of Theatre Arts.  B.A., Adelphi College; M.A., Cornell University.

Fling, Sheila, Assistant Professor of Psychology.  B.A., M.S., Baylor University; Ph.D., The University of Texas at Austin.

Flores, David Ramon, Instructor in Criminal Justice.  B.S., in L.E., Southwest Texas State University, M.A., Sam Houston State University.

Fonteyn, Paul John, Assistant Professor of Biology.  B.S., University of San Francisco; M.A., Ph.D., University of California, Santa Barbara.

Ford, Ramona Louise, Assistant Professor of Sociology.  A.B., Baker University; M.A., Indiana University; M.A., New School of Research; Ph.D., Southern Illinois University.

Forker, Wanda Sue, Instructor in Marketing.  B.B.A., M.B.A., Lamar University.

Foster, Nancy Gilbert, Instructor in Home Economics.  B.S. in H.E., M.S.H.P., Southwest Texas State University.

Foulds, Joyce A., Instructor in Home Economics.  B.S. in H.E.; Southwest Texas State University; M.S., Ohio State University.

Fox, Sarah Northington, Instructor in Home Economics.  B.S., The University of Texas at Austin; M.A., Trinity University.

Fulmer, Tandy Harlan, Instructor in Special Education.  B.S.; The University of Texas at Austin; M.S., University of Oklahoma.

Fulmer, Gilbert Everette, Associate Professor of Philosophy.  B.A., Ph.D., Rice University.

Fulton, William Kenneth, Jr., Assistant Professor of Music.  B.M., North Texas State University; M.M., Texas Tech University.

Gaddis, Marilyn Tyler, Assistant Professor of Education.  B.A., Pomona College; M.A., Claremont Graduate School; Ph.D., The University of Wisconsin-Madison.

Gallagher, Michael Clyde, Associate Professor of Management.  B.B.A., Southwest Texas State University; M.B.A., Texas A&M University; Ph.D., Texas A&M University.

Gahan, Robert Ariel, Professor of Spanish.  B.A., Trinity University; M.A., The University of Texas at Austin; Ph.D., Tulane University.

Garland, James Jasper, Professor of Education and Dean of the School of Education.  B.S., M.A., Ed.D., Baylor University.
Garner, Carl B., Instructor in Religion.
B.S., Abilene Christian College; M.Ed., North Texas State University.

Garner, Thomas Eugene, Instructor in Criminal Justice and Lecturer in Political Science.
B.B.A., J.D., Baylor University.

Garrison, Carol Holt, Instructor in Education.
B.S., M.Ed., North Texas State University.

Geuras, Dean John Peter, Associate Professor of Philosophy.
A.B., Columbia University; M.A., Ph.D., University of Colorado.

Gillis, Marguerite Kapualani, Assistant Professor of Education.
B.S., State College at Bridgewater; M.Ed., University of Guam; Ed.D., West Virginia University.

Gindler, Lawrence Henry, Instructor in Computer Information Systems.
B.A., The University of Texas at Austin; M.B.A., Southwest Texas State University.

*Ginsburg, Harvey Joe, Associate Professor of Psychology.
B.S., Ph.D., University of Houston.

Glennon, Captain Lewis Mather, Assistant Professor of Aerospace Studies.
B.S. in M.E., Grove City College; M.B.A., Southern Illinois University.

Glaves, Robert Frederick, Assistant Professor of Journalism.
B.A., University of Oklahoma, J.M., North Texas State University.

Godwin, Maxwell Paul, Instructor in Accounting.
B.B.A., M.B.A., Southwest Texas State University.

Goldsmith, James M., Assistant Professor of Vocational-Industrial Teacher Education.
B.S., M.Ed., East Texas State University.

Gonzales, Martha Hope, Instructor in Psychology.
B.A., Southwest Texas State University; M.A., Trinity University.

Good, Elmer Leon, Associate Professor of Sociology-Anthropology (Institute of Social Work) and Director of the Institute of Social Work.
B.S., Albright College; M.S.S., Bryn Mawr College; Ph.D., The University of Chicago.

Gordon, Jeffrey Lee, Assistant Professor of Philosophy.
B.A., Northwestern University; M.A., Ph.D., University of Colorado.

Gorman, Robert Francis, Assistant Professor of Political Science.
B.A., Seattle University; M.A., Ph.D., University of Oregon, Eugene.

Goss, Robert J., Instructor in Computer Science and Director of Computing Services.
B.S., State College of Arkansas; M.S., West Texas State University.

Gowena, Paul Ray, Professor of Economics and Chairman of the Department of Finance and Economics.
B.A., M.S. in Ed., Baylor University; Ph.D., The University of Mississippi.

Granberry, Gayle Shipp, Lecturer in Journalism.
B.A., Southwest Texas State University.

Grant, Mary Evelyn, Instructor in English and Counselor in the Counseling Center.
B.A., M.Ed., Southwest Texas State University.

Gratz, Robert David, Associate Professor of Speech Communication and Dean of the School of Applied Arts.
B.S., Lamar State University; M.A., Ph.D., Bowling Green University.

Gravitt, Garland Jack, Associate Professor of English.
B.A., Baylor University; M.A., Southwest Texas State University; Ph.D., Southern Illinois University.

Gray, Brett Thomas, Instructor in Anthropology.
B.A., M.A., Case Western Reserve University.

Grayson, Nancy Jane, Associate Professor of English.
B.A., Texas Christian University; M.A., Ph.D., The University of Texas at Austin.

Green, Don Carroll, Professor of Allied Health Sciences and Dean of the School of Health Professions.
B.S., M.S., Sam Houston State University; Ph.D., Texas A&M University.

Greer, Carole, Instructor in Art.
B.S., Kansas State University; M.F.A., North Texas State University.

Griffin, Gerald Ray, Assistant Professor of Criminal Justice.
B.S.B.A., The University of Tulsa; M.B.A., Southern Methodist University; Ed.D., The University of Tulsa.

Gronberg, Sharon Merle, Instructor in Mathematics.
B.A., Augsburg College; M.S., Midwestern University.

*Faculty Development Leave, Fall, 1979.
Gross, Dalton Harvey, Professor of English.
B.A., Luther College; M.A., Ph.D., Southern Illinois University.

Gulmarin, Edwin Spencer, Lecturer in Allied Health Sciences.
B.A., Southern Christian College; B.S., M.A., Southwest Texas State University.

Guthrie, Roger Hugh, Instructor in Health and Physical Education.
B.B.A., University of Portland; B.S., University of Oregon; M.A., Chico State College.

Habingrethler, Robert Bruce, Assistant Professor of Industrial Arts.
B.A., M.A., Montclair State College; Ed.D., West Virginia University.

Halatln, Theodore Joseph, Associate Professor of Management.
B.A., Montclair State College; M.S., The University of Colorado; D.B.A., Texas Tech University.

Hannan, Herbert Herrick, Professor of Biology and Chairman of the Department of Biology.
B.S. in Ed., Southwest Texas State University; M.A.T., Brown University; M.A., Southwest Texas State University; Ph.D., Oklahoma State University.

Hardy, Joseph D., Instructor in Mathematics.
B.S., M.S., New Mexico Institute of Mining and Technology.

Harper, Debra Kathryn, Instructor in English.
B.A., M.Ed., Southwest Texas State University.

Hardy, Fraser Billings, Instructor in Art.
B.S. in I.A., Southwest Texas State University; M.A., New Mexico Highlands University.

Hasteadt, Laura Whittenberg, Assistant Professor of General Business and Supervisor of Student Teaching.
B.S., M.B.Ed., North Texas State University.

Hatcher, Barbara Ann, Assistant Professor of Education.
B.S. in Ed., The University of Texas at Austin; M.Ed., Southwest Texas State University.

Hawkins, James Nelson, Assistant Professor of Speech Communication.
B.A., Baylor University; M.A., Trinity University.

Hart, Troy Merle, Instructor in Special Education.
B.S., University of Houston; M.Ed., Southwest Texas State University.

Hayes, Elizabeth Gentry, Professor of English.
A.B., San Jose State College; M.A., Ph.D., Stanford University.
**Hays, Joan Camille**, Professor of Health and Physical Education.  
B.S., University of Utah; M.S., University of Wisconsin; Ph.D., The University of Texas at Austin.

**Hazlewood, Donald Gene**, Associate Professor of Mathematics and Computer Science.  
B.A., The University of Texas at Austin; M.S., M.A., Ph.D., Syracuse University.

**Heaberlin, Dickie Maurice**, Associate Professor of English.  
B.A., M.A., North Texas State University; Ph.D., The University of Texas at Austin.

**Hearn, Hilton Waldo, Jr.**, Instructor in Journalism.  
B.A., M.A., The University of Texas at Austin.

**Hefner, Robert Lee**, Associate Professor of Education.  
B.S., East Texas State University; M.Ed., North Texas State University; Ph.D., Texas A&M University.

**Hellman, Allen David**, Professor of Geography.  
B.A., Michigan State University; M.A., Ph.D., The University of Michigan.

**Helm, Raymond Edgar**, Associate Professor of Agriculture.  
B.S., M.S., Ph.D., Texas A&M University.

**Helm, Raymond Edgar**, Associate Professor of Agriculture.  
B.S., M.S., Ph.D., Texas A&M University.

**Hebert, David Philip**, Instructor in Music.  
B.M., University of Houston; M.M., Baylor University.

**Heidler, Jean-Pierre**, Assistant Professor of French.  
B.A., University of Montana; M.A., Brigham Young University; Ph.D., University of Colorado.

**Henderson, Jeffrey Weldon**, Assistant Professor of Journalism.  
B.S., M.A., Sul Ross State College.

**Henderson, Richard Bevier**, Professor of Political Science.  
B.A., Southwest Texas State University; M.A., Ph.D., The University of Maryland.

**Henderson, Jeffrey Weldon**, Assistant Professor of Journalism.  
B.S., M.A., Sul Ross State College.

**Henderson, Richard Bevier**, Professor of Political Science.  
B.A., Southwest Texas State University; M.A., Ph.D., The University of Maryland.

**Henricksen, Ellen Anne**, Instructor in Music.  
B.A., Luther College; M.M., Michigan State University.

**Henry, Frances Louise**, Assistant Professor of Art and Supervisor of Student Teaching.  
B.A., Sam Houston State College; M.A., Fresno State College; Ed.D., Arizona State University.

**Henry, William Gammon, Jr.**, Associate Professor of Education.  
B.M., North Texas State University; M.S.Ed., Ph.D., Indiana University.

**Herbert, David Phillip**, Instructor in Music.  
B.M., University of Houston; M.M., Baylor University.

**Heudler, Jean-Pierre**, Assistant Professor of French.  
B.A., University of Montana; M.A., Brigham Young University; Ph.D., University of Colorado.

**Hickman, Elmer Joe**, Instructor in Accounting.  
B.B.A., Texas A&M; M.B.A., Michigan State University.

**Hicks, Frederick Joseph**, Assistant Professor of Sociology-Anthropology (Institute of Social Work).  
B.S., The University of Corpus Christi; M.S.W., Our Lady of the Lake College.

**Hiebert, Artis John**, Professor of Music and Chairman of the Department of Music and Supervisor of Student Teaching.  
B.M., University of Oklahoma, M.M., Ph.D., George Peabody College.

**Hilbert, Susan Bland**, Assistant Professor of Sociology.  
B.A., M.A., University Oklahoma; M. Phil., Ph.D., University of Kansas.

**Hill, John Stanley**, Professor of English and Dean of the Graduate School.  
B.S., M.A., University of Kansas; Ph.D., University of Wisconsin.

**Hindson, Theodore Thomas**, Assistant Professor and Acting Chairman of the Department of Political Science.  
B.A., La Salle College; M.A., Ph.D., University of Notre Dame.

**Hinkson, Diana Watson**, Instructor in Marketing.  

**Hinkson, William Dillaunty**, Instructor in Biology.  
B.S., Sul Ross State University; M.S.T., Tarleton State University.

**Hoffman, Keith Farrell**, Associate Professor of Health and Physical Education and Supervisor of Student Teaching.  
B.S., in Ed.; M.S. in Ed., Texas A&M University, Ed.D., North Texas State University.

**Holl, Delta Christine**, Instructor in Music.  
B.M., George Peabody College; M.M., The University of Texas at Austin.

**Holmes, Diane Weems**, Instructor in Home Economics.  
B.S., East Texas State University; M.S., Texas Woman's University.

**Holmes, Robert Edward**, Professor of Management and Chairman of the Department of Management and Marketing.  
B.B.A., The University of Texas at Austin; M.B.A., North Texas State University; Ph.D., The University of Arkansas.

*Faculty Development Leave, Spring, 1980.*
Hones, Richard, Assistant Professor of Music.
B.Mus., M.Mus. Ed., North Texas State University; D.M., Indiana University.

Hopper, Captain Woodrow Wilson, Jr., Assistant Professor of Aerospace Studies.
B.B.A., University of Oklahoma; M.S., Troy State University.

Hopson, John Wilbur, Assistant Professor of Chemistry.
B.A., M.A., Southwest Texas State University.

*Horne, Francis Ray, Professor of Biology
B.S., Texas Tech University; M.S., Ph.D., The University of Wyoming.

Houston, Ralph Hubert, Distinguished Professor of English Emeritus.
B.A., North Texas State University; M.A., Ph.D., The University of Texas at Austin.

Hudelson, Dorthea Bush, Assistant Professor of Education.
B.A., University of California; M.Ed., Ed.D., University of Massachusetts.

Huey, Gary Lynn, Instructor in History.
B.S., M.A., Bradley University; M.S., Illinois State University.

Huffaker, Robert Selwyn, Assistant Professor of English.
B.A., Texas A&M University; M.A., Ph.D., North Texas State University.

Huffman, David George, Associate Professor of Biology.
A.B., West Virginia University; M.S., University of New Hampshire.

Hughes, William Roy, Jr., Associate Professor of Physics.
B.A., Columbia College; M.A., Ph.D., Rice University.

Jennings, Nelrose, Instructor in Education.
B.S., Texas Christian University; M.Ed., Southwest Texas State University.

Jensen, Pamela Sue, Instructor in Education.
B.S. in Ed., M.Ed., Southwest Texas State University.

Johnson, Charles Michael, Assistant Professor of Allied Health Sciences and MBO Coordinator.
B.S., East Texas State University; M.S., Ph.D., Texas A&M University.

Johnson, Diana Sellers, Instructor in Psychology.
B.A., North Texas State University; M.A., The University of Texas at Austin.

Johnson, Maurice Allen, Associate Professor of Health and Physical Education.

Johnson, Timothy Francis, Instructor in Criminal Justice.
B.S., Illinois State University; J.D., St. Mary's University.

Johnson, Marvin Austin, Professor of Computer Information Systems.

Jones, Robert Chester, Instructor in Mathematics.
B.S., M.S., Southwest Texas State University.

Jorgenson, Christabel B., Associate Professor of Education.
B.A., Texas Lutheran College; M.A., Ph.D., Texas Woman's University.

* Faculty Development Leave, Spring, 1980.
Jorgenson, David Einar, Associate Professor of Sociology.
B.A., Texas Lutheran College; M.A., Texas Christian University; Ph.D., North Texas State University.

Josserand, Frank Butler, Professor of History.
A.B., M.A., Baylor University; Ph.D., The University of Texas at Austin.

Joy, Glenn Clarence, Professor of Philosophy.
B.A., Seattle Pacific College; M.A., Ph.D., The University of Texas at Austin.

Juel, Martin Oliver, Professor of Education.
B.A., St. Olaf College; M.Ed., Ph.D., University of Minnesota.

Kazmi, Mohammad F., Instructor in General Business.
B.Tech., Indian Institute of Technology-Kanpur, India; M.S., Mississippi State University; M.B.A., University of Houston.

Keck, Theodore Frederick, Professor of Health and Physical Education and Chairman of the Department of Health and Physical Education.
B.S. Minot State College; M.S., Ph.D., University of Oregon.

Keefe, Michael J., Instructor in General Business.
B.A., M.B.A., Southwest Texas State University.

Khoury, Yvonne George, Associate Professor of Health Administration.
B.S., Stetson University; M.S.H.A., Northwestern University.

Knudt, Neal Wayne, Instructor in Health and Physical Education.
B.A., M.S., Fort Hays State College.

Klasser, Betty Jane, Professor of History, Supervisor of Student Teaching, and Acting Chairman of the Department of History; Spring, 1980.
B.A., University of Colorado; M.A., Colorado State College; Ph.D., The University of Texas at Austin.

Knotts, Clinton Don, Associate Professor of Agriculture and Supervisor of Student Teaching.
B.S., M.Ed., Sam Houston State University; Ph.D., Texas A&M University.

Knoss, Elizabeth Singletary, Assistant Professor of Allied Health Sciences.
B.S., M.A., Texas Woman’s University.

Koeln, Robert Dean, Associate Professor of Biology.
B.S., Bethel College; M.S., Kansas State Teachers College; Ph.D., The University of Texas at Austin.

Koennig, Dawn Michelle, Instructor in Health and Physical Education.
B.S., M.S., Western Illinois University.

Koke, Joseph Ralph, Assistant Professor of Biology.
B.S., University of Oregon, Eugene; Ph.D., The University of Alberta, Edmonton.

Kolbe, William DeForest, Professor of Art.
B.S., Wisconsin State University; M.S.A.E., Illinois Institute of Technology.

Kostroun, Phillip Wayne, Assistant Professor of Allied Health Sciences.
A.A., Blinn College; B.S., M.Ed., Sam Houston State University.

Krause, Gary Alan, Instructor in Mathematics.
B.A., Rice University.

Kremlua, Manfred, Associate Professor of German.
A.B., A.M., Ph.D., University of Michigan.

Kriselis, Alexander Ioannis, Assistant Professor of Art.

Kruger, Erwin J., Instructor in Finance.
B.S., Central American University; M.S., Renesselaer Polytechnic Institute.

Kunkei, Lilith Ridgway, Instructor in History.
B.A., St. Lawrence University; M.A., University of Wisconsin-Madison.

Kurtz, William Harry, Assistant Professor in Education.
B.S. in Ed., Northwest Missouri State College; M.Ed., Ed.D., University of Missouri-Columbia.

Laird, Claudia Johnson, Instructor in English.
B.A., Mary Hardin-Baylor College; M.A., Southwestern Texas State University.

Laird, Edgar Stockton, Professor of English.
B.A., M.A., Southwest Texas State University; Ph.D., Rutgers, The State University.

Laman, Jean Bridges, Assistant Professor of Art.
B.A., M.F.A., North Texas State University.

Lane, John H., Jr., Assistant Professor of Sociology.
B.A., M.A., The University of Oklahoma; Ph.D., The University of Texas at Austin.

* Faculty Development Leave, Fall, 1980.
Langabeer, Major James Robert, Assistant Professor of Aerospace Studies and Instructor in Accounting.
A.A., American River College; B.S., Syracuse University; M.B.A., Michigan State University.

Larr, Arlene Will, Assistant Professor of General Business.

Larsen, Robert Douglas, Associate Professor of Geography.
B.S., University of Wisconsin-Superior; M.S., Ph.D., University of Wisconsin, Madison.

Lauer, Jack Charles, Assistant Professor of Music.
B.A., St. Olaf College, Northfield, Minnesota; M.M., Manhattan School of Music.

Laws, Luba Senkevitch, Assistant Professor of French.
B.A., M.A., The University of Texas at Austin.

Leder, Arnold, Associate Professor of Political Science.
B.A., Brooklyn College, City University of New York; M.A., Washington University; Ph.D., Indiana University.

Lee, Cynthia May, Instructor in English.
B.A., M.A., North Texas State University.

Lee, Daniel Houston, Instructor in Mathematics.
A.A., Southern Union College; B.A., West Georgia College; M.A., Sam Houston State University.

Lee, Orland S., Associate Professor of Accounting.
A.A., Northern Oklahoma College; B.S., M.S., Ph.D., Oklahoma State University.

Lemons, James Stanley, Visiting Professor of History.
A.B., William Jewell College; M.A., University of Rochester; Ph.D., University of Missouri.

Lewis, Melanie Carol, Assistant Professor of Biology.
B.S., Newcomb College of Tulane University; M.S., The University of Houston; Ph.D., The University of Texas at Austin.

Lewis, Sylvia Lane, Assistant Professor of Special Education and Supervisor of Student Teaching.
B.S., State University of New York at Buffalo; M.A., Ph.D., The University of Michigan.

Liddle, William David, Associate Professor of History.
B.A., George Peabody College for Teachers; M.A., Ph.D., Claremont Graduate School.

Linard, Rha Ann, Instructor in Music and Supervisor of Student Teaching.

Lindsey, Paul W., Assistant Professor Vocational-Industrial Teacher Education.
B.B.A., M.B.A., Sam Houston State University.

*Lippmann, David Zangwill, Associate Professor of Chemistry.
B.S. in Chem., M.A., The University of Texas at Austin; Ph.D., University of California at Berkeley.

Longley, Glenn, Associate Professor of Biology.
B.S., Southwest Texas State University; M.S., Ph.D., University of Utah.

Longnion, Bonnie Lee, Instructor in Education.
B.S., M.Ed., Lamar State University.

Lord, Michal Anne, Lecturer in Health and Physical Education.
B.S., in Radio-TV-Film, The University of Texas at Austin.

Lorens, Larry Roland, Assistant Professor of Education.
B.S., M.Ed., Southwest Texas State University; Ph.D., Texas A&M University.

Lovin, Keith Harold, Associate Professor of Philosophy and Dean of the School of Liberal Arts.
B.A., Baylor University; Ph.D., Rice University.

Luzad, Vincent Lawrence, Assistant Professor of Philosophy.
B.A., University of Rochester; J.D., Boston University School of Law; Ph.D., University of Pennsylvania.

Lynch, Vernon Eugene, Professor of English.
B.A., Sam Houston State University; M.A., Ph.D., University of Texas at Austin.

Lyndak, Richard John, Instructor in Speech Communication.
B.A., Texas Christian University; M.A., Texas Tech University.

McCall, Carolyn Murphy, Instructor in Special Education and Director of Speech, Hearing, and Language Clinic.
B.S. in Ed., M.Ed., Southwest Texas State University.

McClune, Hazel Beatrice, Professor of Education.
B.S., M.S., North Texas State University; Ph.D., Northwestern University.

McCaskill, Edwin Odel, Assistant Professor of Education.
B.S., M.Ed., Sam Houston State University; Ed.D., East Texas State University.

*Faculty Development Leave, Fall, 1980.
McClung, Harry Byron, Associate Professor of Mathematics.
B.A., M.S., Ph.D., West Virginia University.

McCoy, Ingeborg Ruberg, Associate Professor of Spanish and Supervisor of Student Teaching.
B.A., San Antonio College, B.A., Southwest Texas State University; M.A., Ph.D., The University of Texas at Austin.

McDaniel, Elizabeth Logan, Professor of Education.
B.A., University of California at Los Angeles; M.S., University of Illinois, Ph.D., The University of Texas at Austin.

McDonald, Ben F. Jr., Lecturer in Political Science.
B.A., J.D., The University of Texas at Austin.

McDonald, Vernon Shinn, Assistant Professor of Health and Physical Education and Supervisor of Student Teaching.
B.S. in Ed., M.Ed., Southwest Texas State University.

McEwen, Henry Nelson, Professor of Mathematics.
B.A., M.Ed., Hardin Simmons University; Ph.D., The University of Texas at Austin.

McGee, Tom Christian, Instructor in Education and Counselor in the Counseling Center.
B.S., Trinity University; B.D., Austin Presbyterian Theological Seminar; M.A., The University of Texas at Austin.

McLamore, Peggy Jo, Lecturer in English.
B.A., M.Ed., Southwest Texas State University.

McMahan, Jack B., Lecturer in Psychology.
B.A., M.A., Ph.D., University of Houston.

McKinnon, Neil Scheckler, Instructor in Home Economics.
B.A., Montclair State College, M.S. in Ed., Texas Tech University.

Macdonald, Robert John, Assistant Professor of Political Science.
B.B.A., Southern Methodist University; Ph.D., The University of Texas at Austin.

Maddox, Leon Talmadge, Lecturer in Industrial Arts.
B.S. in I.A., Southwest Texas State University.

Maganza, Dennis Martin, Assistant Professor of Speech Communication and Theatre Arts.
A.B., St. Louis University; M.F.A., University of Minnesota Theatre.

Mallard, Arch Richard, III, Associate Professor of Special Education.
A.A., Tyler Junior College; B.A., M.A., North Texas State University; Ph.D., Purdue University.

Malone, Ann Patton, Instructor in History.
B.S. in Ed., M.A., Southwest Texas State University.

Manford, La Rue Cook, Assistant Professor in Home Economics.
B.S., M.A., Texas Tech University; Ph.D., Texas Woman's University.

March, Frederick Joe, Assistant Professor of Theatre Arts.
B.A., M.A., Texas Tech University.

Marek, Edmund Anthony, Jr., Assistant Professor of Biology and Supervisor of Student Teaching.

Margerson, Kenneth H., Jr., Assistant Professor of History.
A.B., University of North Carolina; M.A., Ph.D., Duke University.

Marlow, Foster Leovy, Professor of Art.

Matlock, Donald Thomas, Associate Professor of Sociology.
B.S., M.S., North Texas State University; Ph.D., The University of Texas at Austin.

Matthews, Joan McKeen, Instructor in Psychology.
B.A., Lake Erie College.

Maurer, Cherry Creamer, Instructor in Mathematics.
B.A., The University of Texas at Austin; M.S., University of Houston.

Mayhew, Christyan, Instructor in Health and Physical Education.
B.A., The University of Texas at Arlington; M.S., Baylor University.

Meathenia, Jack Charles, Associate Professor of English.
B.S., M.A., West Texas State University; Ph.D., Duke University.

Medford, Floyd Chester, Assistant Professor of English.
B.A., Abilene Christian University; B.D., The University of the South; Th.D., The School of Theology at Claremont, California; Ph.D., The University of Texas at Austin.

Mehlner, Wilda Harris, Instructor in Accounting.
B.B.A., Sul Ross State University; M.B.A., Southwest Texas State University.

Meloni, Alberto Cosimo, Instructor in History.
B.A., M.A., Marquette University; M.A., Harvard University.
Merryman, Sandra Stroud, Associate Professor of Psychology.
B.A., George Peabody College; Ph.D., Indiana University.

Meyer, George Herbert, Associate Professor of Biology.
B.S., Baylor University; M.A., The University of Texas at Austin.

Michalk, Victor Edward, Professor of Physics and Chairman of the Department of Physics.
B.S., M.S., Texas A&M University; Ph.D., Texas A&M University.

Miller, Billy Max, Assistant Professor of Health and Physical Education and Director of Athletics.
B.S., in Ed., M.Ed., Southwest Texas State University.

Miller, Damon, J., Associate Professor of Education.
B.S., M.Ed., Howard Payne College; Ph.D., The University of Texas at Austin.

Miller, Roy Virgil, Jr., Professor of Agriculture and Chairman of the Department of Agriculture.
B.S., Texas Tech University; M.S., Ph.D., Colorado State University.

Miller, Shirley Matlde, Assistant Professor of Psychology.
A.B., McPherson College; A.M., Ph.D., University of Michigan.

Mills, Lorraine Patricia, Instructor in History.
B.A., University of California.

Millap, William Leonard, Associate Professor of Anthropology.
B.A., California State University; M.A., Northern Illinois University; Ph.D., University of Missouri.

Milloy, Leatha Faye, Assistant Professor of Journalism.
B.S., Sam Houston State College; M.S., Ph.D., Texas A&M University.

Mitchell, Mancil Leon, Assistant Professor of Education and Director of Placement and Career Planning.
B.S. in Ed., M.Ed., Southwest Texas State University.

Mollenkopf, Douglas, Instructor in Management.
B.S., M.B.A., Southwest Texas State University.

Mooney, Robert Thurston, Associate Professor of Allied Health Sciences and Chairman of the Department of Allied Health Sciences.
B.S., M.Ed., Texas A&M University.

Moore, Betty Jean, Associate Professor of Education.
A.B., Pasadena College; M.A., University of Nevada; Ph.D., University of Illinois.

Moore, Billy Glenn, Lecturer in English.
B.A., M.A., Southwest Texas State University.

Moore, Joe Midge, Associate Professor of Education.
B.S., M.Ed., Ed.D., North Texas State University.

Moore, Newlyn Barnard, Associate Professor of Home Economics and Acting Chairman of the Department of Home Economics.
B.S. in H.Ed., M.Ed., Southwest Texas State University; Ph.D., The University of Texas at Austin.

Moore, Richard Henry, Instructor in Anthropology.
B.A., DePauw University; M.A., Ohio State University.

Morgan, Cella Ann, Professor of Economics.
A.A., Lamar State College of Technology; B.B.A., The University of Texas at Austin; M.A., Ph.D., University of Houston.

Moss, Gary Lynn, Instructor in Health and Physical Education.
B.A.T., Sam Houston State University; M.S., Texas A&M University.

B.S. in Ed., Concordia Teachers College; M.S., Eastern Michigan University.

Munger, Daniel Irvin, Associate Professor of Speech Communication.
B.S. in Ed., Southwest Missouri State College; M.Ed., University of Missouri; Ph.D., Indiana University.

Munn, Carolyn Denise, Instructor in Sociology.
B.A., M.A.T., Southwest Texas State University.

Murillo, Gilbert J., Assistant Professor of Sociology-Anthropology (Institute of Social Work).
B.A., Gonzaga University; M.S.W., Our Lady of the Lake College; D.S.W., University of Denver.

Murphy, Maxwell Cole, Jr., Assistant Professor of Political Science.
B.S., United States Military Academy; M.A., University of Virginia; Ph.D., The University of Texas at Austin.

Newberry, William Clarke, Associate Professor of Education.
B.S. in Ed., Southwest Texas State University; M.Ed., Stephen F. Austin State University; Ed.D., The University of Texas at Austin.

Newman, Charlotte, Assistant Professor of Art.
B.A., Bard College; M.A., New York University.

Newsom, Rollo Kern, Associate Professor of Sociology and Chairman of the Department of Sociology-Anthropology.
B.S., The University of Texas at Austin; M.S., North Texas State University; Ph.D., The University of Texas at Austin.

Nicola, Ralph Timothy, Associate Professor of Education.
B.S., M.Ed., Ed.D., North Texas State University.

Nielsen, Erik August, Associate Professor of Art.
B.A., M.A., University of Southern Florida; Ph.D., University of Texas at Austin.

Norris, Donald Glenn, Assistant Professor of Religion.
B.A., Baylor University; B.D., M.D., Southwestern Baptist Theological Seminary.

*Norris, William Elmore, Jr., Professor of Biology and Dean of the University.
B.S., Southwest Texas State University; Ph.D., The University of Texas at Austin.

Northcutt, Robert Allan, Professor of Mathematics and Chairman of the Department of Mathematics.
B.A., M.A., Ph.D., The University of Texas at Austin.

Nuhn, Benjamin Roger, Lecturer in Journalism.
B.J., The University of Texas at Austin.

O'Connell, John Joseph, Associate Professor of Sociology.
A.B., M.A., S.T.B., St. Louis University; Ph.D., Loyola University.

O'Connor, Robert Harold, Assistant Professor of English.
A.B., Cornell University; M.A., State University of New York; Ph.D., Bowling Green State University.

Ogle, Robert, Associate Professor of English.
B.A., University of Minnesota; M.S., University of Chicago; Ph.D., University of Illinois.

Ogles, Henry John, Professor of Psychology.
B.A., Youngstown State University; M.A., Ph.D., University of Pittsburgh.

Olson, Marilynn Strasser, Assistant Professor of English.
B.A., Michigan State; M.A., Ph.D., Duke University.

Olson, Mary Webb, Instructor in Education.
B.A., Trinity University; M.Ed., Southwest Texas State University.

Orenduff, Jess Michael, Associate Professor of Philosophy and Chairman of the Department of Philosophy.
B.A., The University of Texas at Austin; M.A., University of New Mexico; Ph.D., Tulane University.

Parkay, Forrest Winston, Assistant Professor of Education.
B.A., M.A., University of Illinois; Ph.D., The University of Chicago.

Parlin-Speer, Diane, Associate Professor of English.
B.A., Lewis and Clark College; M.A., Bowling Green State University; Ph.D., University of Iowa.

Parks, Archie Oliver, Professor of Chemistry.
B.S., Sul Ross State College; M.A., Southwest Texas State University; Ph.D., Louisiana State University and A&M College.

Patton, Robert Edward, Professor of Health and Physical Education.
B.S. in Ed., M.Ed., Southwest Texas State University; Ed.D., North Texas State University.

Payne, Eugene Edgar, Associate Professor of Accounting and Vice President for Finance and Management.
B.S., M.S., Texas A&M University; Ph.D., University of Oklahoma.

Peach, James Thomas, Assistant Professor of General Business.
B.A., Ph.D., The University of Texas at Austin.

Pearcy, C. W. Robin, Instructor in Criminal Justice and Political Science.
B.A., The University of Texas at Austin; J.D., University of Houston.

Perez, Rosita, Instructor in Mathematics.
B.S. in Ed., M.Ed., Southwest Texas State University.

Perry, Reeves Baldwin, Professor of Chemistry.
B.S., East Texas State University; M.S., North Texas State University; Ph.D., The University of Texas at Austin.

Perry, Robert Charles, Instructor in Spanish.
B.A., Spring Hill College; M.A., The University of Texas at Austin.

Peterman, Timothy James, Instructor in Music.
B.A., California State University, Sacramento; M.M., Arizona State University.

Peterson, Norman Clair, Professor of English.
B.A., M.A., The University of Texas at Austin; Ph.D., University of Iowa.

* Faculty Development Leave, Fall, 1980.
Pierson, Michael James, Director of Occupational Education.
   B.S.Ed., Abilene Christian College; M.Ed., Southwest Texas State University; Ph.D., Texas A&M University.

Pino, David James, Associate Professor of Music.
   B.M.M., M.M., Michigan State University; D.M.A., The University of Texas at Austin.

Pride, Carl Preston, Associate Professor of Mathematics.
   B.A., University of Omaha; M.S., Rutgers University; Ph.D., The University of New York at Binghamton.

Pohl, James William, Professor of History.
   B.A., M.A., North Texas State University; Ph.D., The University of Texas at Austin.

Pohl, Patsy Reynolds, Instructor in English.
   B.A., M.A., Southwest Texas State University.

Pohdey, Carl Pretton, Associate Professor of Mathematics.
   B.A., University of Omaha; M.S., Rutgers University; Ph.D., The University of New York at Binghamton.

Pohl, William, Professor of History.
   B.A., M.A., North Texas State University; Ph.D., The University of Texas at Austin.

Pohl, Patsy Reynolds, Instructor in English.
   B.A., M.A., Southwest Texas State University.

Pool, William Clayton, Professor of History.
   B.S., M.S., Ph.D., The University of Texas at Austin.

Poschman, Lee Ann, Instructor in Home Economics.
   B.A., San Diego State College; M.S., University of Maryland.

Psenick, Michael D., Lecturer in Industrial Arts.
   B.S. in I.A., Southwest Texas State University.

Pugh, Martha Eileen, Instructor in Psychology.
   B.S., Michigan State University.

Ramon, Adolph Ignacio, Professor of Health Administration.
   B.A., University of Texas at Austin; B.S. in M.R.S., Incarnate Word College; M.S., Trinity University; B.B.A., St. Mary's University of San Antonio.

Rappaport, Bernard, Professor of Health Administration.
   B.A., New York University; M.A., George Washington University; M.H.A., Baylor University.

Ratliff, Ernest Francis, Jr., Assistant Professor of Mathematics.
   B.S., McNeese State College; M.A., Ph.D., University of Oklahoma.

Reeh, Albert F., Assistant Professor of Health and Physical Education.
   B.S., M.Ed., Southwest Texas State University.

Reese, Otto Grant, Associate Professor of Accounting.
   B.B.A., M.A., Southwest Texas State University, C.P.A.

Reeves, Dona Rae, Professor of German.
   B.A., M.A., Ph.D., The University of Texas at Austin.

Reld, Jan Charles, Lecturer in Journalism.
   M.A., The University of Texas at Austin.

Reynolds, Martha Helen, Associate Professor of Music and Supervisor of Student Teaching.
   B.A., Manchester College; M.M., Pius XII Institute, Villa; Ph.D., North Texas State University.

Rice, Mitchell Forrest, Assistant Professor of Political Science.
   B.A., M.S., California State University; Ph.D., Claremont Graduate School.

Rich, Francis Marion, Jr., Professor of Political Science.
   J.D., Ph.D., University of Georgia.

Riddell, Seleita Frances, Instructor in Special Education and Supervisor of Student Teaching.
   B.S. in Ed., McNeese State College; M.Ed., West Texas State University; M.S., North Texas State University.

Ridener, John F., Assistant Professor of Education.
   B.S., M.Ed., West Texas State University; Ed.D., East Texas State University.

Riebe, Patricia Helen, Lecturer in Health Administration.
   B.S. in Ed., The University of Texas at Austin.

Riepe, Russell Casper II, Associate Professor of Music.
   B.M., Southern Illinois University; M.A., Ph.D., Eastman School of Music, University of Rochester.

Roach, Ed Dupree, Professor of Marketing and Dean of the School of Business.
   B.B.A., M.B.A., North Texas State University; Ph.D., The University of Texas at Austin.

Robenstine, Carol Elaine, Instructor in Home Economics.
   B.A., University of Southern Mississippi; M.S., Louisiana State University.

Robinson, James William, Instructor in Criminal Justice.
   B.S., M.A., Sam Houston State University.

Rodriguez, Carlos Gonzalez, Assistant Professor of Education.
   B.S. in Ed., M.Ed., Southwest Texas State University; Ph.D., The University of Texas at Austin.

Rodriguez, Laura, Instructor in Education.
   B.S. in Elem. Ed., Texas A&M University; M.Ed., The University of Texas at Austin.

Romo, Paula Jean, Instructor in Home Economics.
   B.S., M.S., University of Texas at Austin.
Ronan, Clifford John, Associate Professor of English.
   B.A., Amherst College; M.A., Ph.D., University of California at Berkeley.

Rosenbalm, John Olmsted, Associate Professor of English.
   B.A., M.A., Ph.D., North Texas State University.

Ross, Charles Closer, Instructor in Accounting.
   B.B.A., M.B.A., Southwest Texas State University.

Ross, John Kelzy, Assistant Professor of Management.
   B.B.A., Texas Wesleyan College; M.B.A., University of Dallas.

Row, Brian Gillow, Associate Professor of Art and Chairman of the Department of Art.

Rubin, Jay Leonard, Instructor in History.

Rudzinski, Walter, Assistant Professor of Chemistry.
   B.S., University of Detroit; Ph.D., University of Arizona.

Ruiz, Maria Paez de, Instructor in Spanish.
   B.A., University of Puerto Rico; M.A., Louisiana State University.

Rush, David Alan, Associate Professor of Speech Communication.
   B.A., University of Illinois; M.A., University of Iowa; Ph.D., University of Illinois.

Rutledge, Dudley William, Instructor in Health and Physical Education.
   B.A., Texas Lutheran College; M.S., The North Dakota State University.

Rydell, Glen Myrlln, Professor of Agriculture.
   B.S., M.S., Ph.D., Texas A&M University.

St. John, Donna Gayle, Lecturer in Health and Physical Education.
   B.A., San Jose State College.

Salem, Philip J., Assistant Professor of Speech Communication.
   B.S., Northern State College, M.A., Ph.D., University of Denver.

Sanders, Donald Edward, Instructor in General Business.
   B.B.A., Texas Tech University; J.D., The University of Texas School of Law.

Savage, Vernon Howard, Associate Professor of Economics.
   B.A., M.A., North Texas State University; Ph.D., The University of Texas at Austin.

*Sawey, Ronald Marvin, Assistant Professor of Computer Science.
   B.A., M.A., Ph.D., The University of Texas at Austin.

Sawyers, Phyllis Luckenbach, Associate Professor of Art.
   B.F.A., The University of Texas at Austin; M.A., Columbia University.

Scheel, Mildred H., Instructor in Home Economics.
   B.S., The University of Texas at Austin; M.S., The University of Alabama.

Schilling, Lester Lorenzo, Jr., Professor of Speech Communication.
   B.S., Western Michigan University; M.A., Columbia University; Ph.D., University of Wisconsin.

Schmidt, Darlene Helen, Assistant Professor of Health and Physical Education.
   B.S., Western Illinois University; M.A.T., New Mexico State University; Ph.D., The University of Iowa.

Schmidt, John Charles, Assistant Professor of Music.
   B.Mus., Southwestern University; S.M.M., Union Theological Seminary School of Sacred Music; Ph.D., New York University.

Schneider, Edward L., Associate Professor of Biology.
   B.A., M.S., Central Washington State College; Ph.D., University of California.

Schneider, Stanley Scott, Instructor in Biology.
   B.S. in Ed., M.S., Southwest Texas State University.

Scholzinski, Edward J., Instructor in Psychology.
   B.S. in Ed., M.Ed., Southwest Texas State University.

Schoyen, Richard Andrew, Instructor in Mathematics.
   B.S., M.S., Lamar State College of Technology.

Schroeder, Colonel Arthur Henry, Professor of Aerospace Studies
   B.S., United States Naval Academy; M.S. in B.A., George Washington University.

Schultz, Clarence Carven, Professor of Sociology.
   B.S., M.A., Southwest Texas State University; Ph.D., The University of Texas at Austin.

Scott, Charlotte Robinson, Associate Professor of Health and Physical Education.
   B.S., M.A., Ph.D., Texas Woman's University.

Scott, John Walter, Instructor in English.
   B.A., M.A., University of Arkansas.

Scott, Pamela Sue, Instructor in English.
B.A., M.A., University of Arkansas.

Seifert, Edward Herman III, Assistant Professor of Education.
B.S. in Ed., Ed.S., Central Missouri State University; M.S. in Ed. Northwest Missouri State College; Ed.D., Oklahoma State University.

Seifert, Vernon Donald, Associate Professor of Health Administration and Chairman of the Department of Health Administration.
B.S., Northwestern University; M.P.H., Tulane University.

Selans, Harold Leroy, Instructor in Computer Science.
B.S. in Ed., M.A., University of Alabama.

Seligman, Leonore Glickman, Instructor in Music.

Shaw, Robert Ialane, Instructor in Biology.
B.S., Southwest Texas State University; M.S., Ph.D., Texas A&M University.

Shaw, Susan Pfenniger, Instructor in Special Education.
B.S. in Ed., M.Ed., Southwest Texas State University and Supervisor of Student Teaching.

Sheil, Lon Ray, Professor of Agriculture.
B.S., M.S., Ed.D., Oklahoma State University.

Shepard, Kenneth S., Professor of Health Administration and University Physician.
A.B., M.D., Duke University.

Shields, Patricia Mary, Assistant Professor of Political Science.
B.A., University of Maryland; M.A., Ph.D., The Ohio State University.

Short, Alvin Philip, Associate Professor of Sociology.
B.S., Southwest Missouri State College; M.A., Ph.D., Emory University.

Shrader, Robert Edgar, Lecturer in Journalism.
B.S in Radio-TV Film, The University of Texas at Austin.

Silkes, Joseph Neville, Associate Professor of Psychology.
B.A., Carleton College; Ph.D., The University of Texas at Austin.

Simmons, Catherine S., Instructor in Psychology.
B.A., Randolph-Macon Woman's College, M.A., The University of North Carolina at Chapel Hill.

Slaaton, Stanley Lewis, Professor of Biology.
B.S., M.S., North Texas State University; Ph.D., Texas A&M University.

Slemon, Douglas Durland, Assistant Professor of Music.
B.M., M.M.F., North Texas State University.

Smith, James Dennis, Assistant Professor of Mathematics.
B.A., M.A., The University of Texas at Austin; Ph.D., Texas Christian University.

Smith, James Donovan, Instructor in Criminal Justice.
B.A., The University of Texas at Austin; M.A., The University of Alabama.

Smith, Jean Amelia, Professor of Health and Pysical Education.
B.S., M.S., McMurry College; D.P.E. Indiana University.

Smith, Lee H., Professor of Management and Marketing and President of the University.
B.S., Texas A&M University; M.S., Southern Methodist University; Ph.D., Texas A&M University.

Smith, Lewis Joseph, Instructor in Health and Physical Education.
B.S., Loyola College, M.Ed., Southwest Texas State University.

Smith, Milton Lloyd, Professor of Education.
B.S., University of Corpus Christi; M.S. Texas A&M University; Ph.D., The University of Texas at Austin.

Smith, Michael Bruce, Instructor in Management.
B.S., Southwest Texas State University; J.D., South Texas College of Law.

Smapp, Matthew L., Lecturer in Psychology.
B.A., Wagner College; M.A., Brigham Young University; Ph.D., The University of Texas at Austin.

Snodgrass, Gregory, Assistant Professor of Psychology and Counselor in The Counseling and Testing Center.
B.A., M.S., University of Alaska; Ph.D., University of California, Los Angeles.

Spalding, Rose Johnson, Assistant Professor of Political Science.
B.A., University of Kentucky; Ph.D., The University of North Carolina.

Spannengel, Billy Wayne, Instructor in Agriculture.
B.S., Texas A&M University; M.Ed., Southwest Texas State University.

Sparks, Rebecca Lewis, Associate Professor of Education.
B.A., Baylor University; B.S., Texas Woman's University; Ed.D., North Texas State University.

* Faculty Development Leave, Fall, 1979.
Spear, Arthur Walsh, Associate Professor of Physics.
B.A., M.A., Southwest Texas State University.

Speer, Wilson Edward, Lecturer in Criminal Justice.
B.S., East Texas State University.

Stair, Gregg Leroy, Instructor in Mathematics.
B.S. in Ed., Emporia State University; M.S., University of Notre Dame.

Stalnaker, Sylvia D., Assistant Professor of Home Economics.
B.S. in H.E., Southwest Texas State University, M.S., Ph.D., Texas Woman's University.

Starling, Betty Ross, Assistant Professor of English and Supervisor of Student Teaching.
B.A., Harding College, M.A., The University of Texas at Austin.

Stedman, Nathan Alexander, III, Associate Professor of English.
B.B.A., The University of Texas at Austin, M.A., Texas Christian University, Ph.D. Florida State University.

Stevens, David Ronald, Professor of English.
B.A., M.A., Ph.D., The University of Texas at Austin.

Stevens, Paul Lester, Professor of Education.
B.S., Texas A&M University; M.Ed., The University of Houston; Ph.D., Texas A&M University.

Stevenson, Robert Mahaffey, Professor of Finance.
B.A., Duke University; M.A., Pennsylvania State University; D.B.A. Indiana University; C.P.A., C.I.U.

Stewart, James Carl, Jr., Assistant Professor of Health Administration.
B.A., Texas A&M University; M.S., North Texas State University; Ph.D. University of Oklahoma.

Stimmel, David Theron, Professor of Psychology
B.A., M.A., Southern Methodist University; Ph.D. University of Michigan.

Stott, Cecyl David, Assistant Professor of Accounting.
B.B.A., M.B.A., Southwest Texas State University, C.P.A.

Stouffer, Willard Brewer, Jr., Associate Professor of Political Science.
B.A., Northwestern University; M.A., Miami University, Ph.D. Duke University.

Strickland, Jack Vernon, Instructor in Marketing.
B.A.A.S., M.B.A., Southwest Texas State University.

Sturdivant, Marian M., Instructor in General Business.
B.A., M.A., J.D., St. Mary's University of San Antonio.

Suicide, Charles John, Professor of Art.
B.S. in Ed., Western New Mexico University; M.A., New Mexico Highlands University.

Sudduth, James Claude, Associate Professor of Music, Band Director, and Supervisor of Student Teaching.

Sullivan, Alfred Burke, Associate Professor of Political Science.
B.A., Dartmouth College; M.A., University of Rhode Island; Ph.D., University of Utah.

Sutton, Elizabeth Anne, Instructor in English.
B.A., Kenyon College; M.A., University of California, Irvine.

*Swinney, Everett, Professor of History and Chairman of the Department of History.
B.A., Ohio Northern University; M.A., Pennsylvania State University; Ph.D., The University of Texas at Austin.

Swinton, Marilyn Mae, Assistant Professor of Speech Communication.
B.A., Cornell College; M.A., University of Texas at Austin.

Tankard, Elaine Fuller, Instructor in Journalism.
B.S., University of Florida; M.A., The University of Texas at Austin.

Taylor, Mary Agnes, Assistant Professor of English.
B.A., Southwest Texas State University; M.A., San Francisco State College.

*Thomas, Jerry Leon, Associate Professor of Education.
B.S., M.S., Western New Mexico University; Ph.D., The University of Texas at Austin.

Thompson, Robert Bryan, Assistant Professor of English.
B.S. in Ed., B.A., The University of Texas at Austin; M.A., Stephen F. Austin State University; Ph.D., University of Iowa.

Thornton, William Joseph, Jr., Instructor in Health and Physical Education and Coach.
B.S. in Ed., M.Ed., Southwest Texas State University.

Tieken, Arlen R., Assistant Professor in Education.
B.Ed., M.Ed., Southwest Texas State University; Ph.D., Agricultural and Mechanical College of Texas.

* Faculty Development Leave, Spring, 1980.
Todd, Mark Evan, Instructor in Art.

*Tolbert, Evelyn Osman, Assistant Professor of English.
B.A., M.A., The University of Houston.

Tomblin, Anthony Wayne, Instructor in General Business.
B.A., Southwest Texas State University; J.D., St. Mary's University of San Antonio.

Tran, Paula Chadwick, Instructor in English.
B.A., St. Mary's University; M.A., Southwest Texas State University.

Travelle, Maria Rodriguez, Assistant Professor of Education.
B.S., M.Ed., Ph.D., Texas Women's University.

Treonor, James, Assistant Professor of Philosophy.
B.A., St. Patrick's College; M.A., Claremont Graduate School.

Trip, Theodore Paul, Instructor in Accounting.
B.B.A., M.B.A., Southwest Texas State University.

Trotter, James T., Jr., Lecturer in Journalism.
B.S.J., The University of Tennessee.

Truitt, Linda Joyce, Instructor in Home Economics.
B.S., Eastern New Mexico University; M.S., Texas Tech University.

Tuf, Donald Wray, Professor of Biology.
B.A., San Jose State University; M.S., Washington State University; Ph.D., Texas A&M University.

Tupa, Diana Dowden, Assistant Professor of Biology.
B.S., M.A., M.S., Southwest Texas State University; Ph.D., The University of Texas at Austin.

Turner, H. Arlin, Professor of Therese Kayser Lindsey Chair of Literature, Department of English.
B.A., M.A., Ph.D., The University of Texas at Austin.

Turpin, Thomas Evans, Instructor in English.
B.A., M.Ed., Southwest Texas State University.

Ugalde, Sharon Elizabeth, Associate Professor of Spanish.
B.A., University of California at Davis; M.A., Ph.D., Stanford University.

Upchurch, Marian Lee, Assistant Professor of Allied Health Sciences.
A.A., Stephens College; B.S. in Speech, Northwestern University; M.P.H., University of North Carolina, Chapel Hill; D.P.H., The University of Texas Health Science Center at Houston.

Varner, John Lesley, Assistant Professor of Music.
B.S., Lamar State College; M.Mus., The University of Tennessee.

Vernon, William R., Instructor in Computer Information Systems.
B.B.A., M.B.A., Southwest Texas State University.

Vickers, Albert Francis, Jr., Instructor in Industrial Arts.
B. Arch., The University of Texas at Austin; M.Ed., Southwest Texas State University.

Visser, Sent, Assistant Professor of Geography and Planning.
B.A., M.A., M.S., The University of Auckland, New Zealand; Ph.D., The Ohio State University.

Vivion, Michael Joe, Instructor in English.
B.A., Arizona State University; M.A., Wichita State University.

Wacker, James Herbert, Associate Professor of Health and Physical Education and Head Football Coach.
B.S. in P.E., Valparaiso University; M.A., Wayne State University; Ed.D., The University of Nebraska.

Wade, James Frederick, Assistant Professor of Computer Science.
B.S., M.S., Ph.D., University of Missouri.

Walker, Joe Wayne, Associate Professor of Industrial Arts and Supervisor of Student Teaching.
B.S., M.Ed., Ed.D., North Texas State University.

Wall, Daniel Patrick, Instructor in Health and Physical Education and Head Basketball Coach.
A.B., St. Benedict's College; M.S., Central Missouri State College.

Walts, Robert Warren, Professor of English.
A.B., Newark College of Rutgers University; A.M., Ph.D., College for Men, Rutgers University.

Ward, Doyle Glynn, Professor of Special Education.
B.A., Harding College; M.A., University of Illinois; Ph.D., University of Missouri.

Washauer, Max Leon, Assistant Professor of Mathematics.
B.S., University of Chicago; Ph.D., Louisiana State University.

* Faculty Development Leave, 1st and 2nd Summer Terms, 1980.
Warshauer, Hiroko Kawaguchi, Instructor in Mathematics.
B.A., University of Chicago; M.S., Louisiana State University.

Watson, Bert Allan, Assistant Professor of Political Science and History, and Vice President for University Affairs.
B.A., M.A., Baylor University; M.Phil., Ph.D., George Washington University.

Webb, Frances Odette Milchum, Assistant Professor of Music.
A.B., Coker College; M.M., Indiana University.

Weinberger, George Martín, Associate Professor of Political Science.
B.A., Temple University; M.P.A., D.P.A., University of Georgia.

Weigel, Lynda Joyce, Instructor in English.
B.A., M.A., Southwest Texas State University.

Welborn, Ruth Ann B., Associate Professor of Allied Health Sciences.
B.S.N., The University of Texas Nursing School-Calveston; M.A., The University of Texas at San Antonio.

Weiler, Eric Corville, Assistant Professor of Art.

Whalen, Norman Matthew, Associate Professor of Anthropology.
B.A., St. Mary's University; M.A., Ph.D., University of Arizona.

Whalin, John Robert, Associate Professor of Music.
B.M., Oberlin College; M.M., D.Mus., Indiana University.

Wharton, Billy J., Lecturer in Allied Health Sciences.
B.S. in Hlth. Prof., Southwest Texas State University.

Wheeler, Richard Wade, Professor of Psychology and Chairman of the Department of Psychology.
B.S., M.A., Ph.D., The University of Houston.

White, Jana Bette, Instructor in Mathematics.
B.A., The University of Texas in Austin; B.S., M.S., Lamar State University.

Whitely, Ronald Edward, Instructor in Political Science.
B.S. in Ed., M.A., Southwest Texas State University.

Whittenberg, David Calvin, Professor of Biology.
B.S., M.S., Ph.D., Texas A&M University.

Whiteside, Bobby Gene, Professor of Biology.
A.S., Eastern Oklahoma A&M College; B.S., M.S., Oklahoma State University.

Whitley, Glenn Ross, Assistant Professor of Geography.
B.S., Texas Tech University; M.S., Ph.D., Texas A&M University.

Whitlock, Betty Ridge, Instructor in Music.
B.M.Ed., Texas Technological College; M.A., Stephen F. Austin State University.

Wilder, Catherine Turman, Instructor in English.
B.A., M.A., Oklahoma State University.

Williams, Bennor Caroline Carroll, Instructor in Home Economics.
B.S., Saint Mary-of-The-Woods College; M.Ed., University of Illinois.

Williams, Laura Mings, Assistant Professor of Education.
B.S., The University of Texas at Austin; M.Ed., Southwest Texas State University; Ed.D., Texas A&M University.

Williams, Marvin Lee, Associate Professor of Speech Communication.
B.A., Hardin-Simmons University; M.A., Ph.D., University of Oklahoma.

Williams, Thomas Joseph, Associate Professor of Political Science.
B.S. in Ed., M.Ed., Ph.D., University of Georgia.

Williams, Tommy Carroll, Assistant Professor of Art.
A.A., Lubbock Christian College; B.S., West Texas State University; M.Ed., Ph.D., University of Oklahoma.

Williamson, Bobby Lee, Professor of Education.
B.S., Texas A&M University; M.Ed., Southwest Texas State University; Ed.D., Colorado State College.

Wiloughby, Jack Michael, Associate Professor of Education and Assistant Dean in the School of Education.
B.S., Texas A&M University; M.Ed., Southwest Texas State University; Ed.D., University of Southern Mississippi.

Williams, Charles Ronald, Professor of Chemistry.
B.A., The University of Texas at Austin; M.A., Southwest Texas State University; Ph.D., Texas A&M University.

Wilson, James Arthur, Professor of History.
B.A., M.A., Ph.D., University of Arizona.

Wilson, Ryce Neal, Assistant Professor of Art.

Wilson, Wilt Leland, Professor of Marketing.
B.B.A., M.S., Texas A&M University; Ph.D., University of Arkansas.

Wimsatt, Mary Ann, Assistant Professor of English.
A.B., Stetson University; M.A., Ph.D., Duke University.

Windham, Billy Lee, Associate Professor of Industrial Arts.
B.S. in Ed., M.A., Southwest Texas State University; Ed.D., Texas A&M University.

Winfield, Darwin Eugene, Associate Professor of Health Administration and Acting Chairman of the Department of Health Administration, Fall, 1979.
B.S., Louisiana State Polytechnic Institute; M.S.H.A., Northwestern University.

Wolverton, Byron Adams, Associate Professor of Music and Acting Chairman of the Department of Music, Spring, 1980.
B.Mus., M.A., University of Missouri; Ph.D., Indiana University.

Wood, Ethel Jean, Instructor in Sociology-Anthropology.
B.A., East Texas State College; M.A., The University of Texas at Austin.

Woolsey, Timothy Dwight, Assistant Professor of Music.
B.A., Trinity; M.M., D.M.A., The University of Texas at Austin.

Woosley, John Thomas, Assistant Professor of Biology.
B.A., M.A., University of South Florida; Ph.D., Medical College of Georgia.

Worley, Stinson Ezell, Professor of Education.
B.A., Baylor University; M.Ed., Ed.D., North Texas State University.

Wortham, Marshall Ross, Associate Professor of Art.
B.A., The University of Texas at Austin; M.F.A., Cranbrook Academy of Art.

Wright, Betty Lee, Associate Professor of Health and Physical Education.
B.S., Alabama College; M.Ed., Ed.D., The University of Texas at Austin.

Wright, Loyd Stanley, Associate Professor of Psychology.
B.S., University of Houston; M.A., The University of Texas at Austin; Ed.D., University of Illinois.

Yager, Billy Joe, Professor of Chemistry and Chairman of the Department of Chemistry.
B.S., Southwest Texas State University; M.S., Ph.D., Texas A&M University.

Yarchuska, John Andrew, Assistant Professor of Industrial Arts and Director of Printing.

Yates, David Carl, Assistant Professor of Journalism and Supervisor of Student Teaching.
B.A., North Texas State University; M.A., Southwest Texas State University.

Yearyan, Howard Reid, Assistant Professor of Economics.
B.S., M.S., Texas A&M University.

Yeary, James Donald, Associate Professor of Accounting.
B.B.A., M.S.A., Texas Tech University; Ph.D., Oklahoma State University.

Young, Willard Cooper, Professor of Biology and Dean of the School of Science.
B.S., M.S., The University of Texas at Austin; Ph.D., University of Colorado.

Zedler, Empress Young, Professor of Special Education.
B.A., M.A., Ph.D., The University of Texas at Austin.

Zielinski, Gary Michael, Instructor in Computer Science.
B.S., M.S., Ball State University.

Zoraster, Steven, Instructor in Mathematics.
B.A., M.A., University of California, Los Angeles.

Zunker, Vernon George, Professor of Education and Director of Counseling and Testing Center.
B.S., Texas Lutheran College, M.Ed., Trinity University; Ed.D., University of Houston.
Retired Members of Faculty

Abernathy, Elton, Ph.D., Professor of Speech Communication and Theatre Arts.
Akin, William Carroll, M.Ed., A.M., Associate Professor of Mathematics.
Allen, Joe Earl, M.A., Associate Professor of Education.
Barton, James Gabriel, M.A., Professor of Speech Communication and Theatre Arts.
Bennett, Alvin Lowell, Ph.D., Professor of English.
Bowers, Victor Lee, Ph.D., Professor of Industrial Arts and Chairman of the Department of Industrial Arts.
Bowles, Delbert Richard, Ph.D., Associate Professor of Education.
Brown, Doris Daisy, M.A., Instructor in Home Economics.
Broxton, Cleo Cook, M.Ed., Assistant Professor of Health and Physical Education.
Bruce, Irna Lou, M.A., Associate Professor of Education.
Buckley, Frank Wilson, Ph.D., Professor of Journalism.
Buie, Tollie Raymond, Ed.D., Professor of Agriculture.
Burnett, Clinton Earl, LL.D., Associate Professor of Education and Director of Placement and Extension.
Callahan, Maurice Moore, M.A., Professor of Music.
Cates, Jerome Curtis, M.B.A., Professor of Accounting and Computer Science and Vice President for Fiscal Affairs.
Coleman, Frances Gibson, M.A., Associate Professor of Home Economics.
Cude, Don, M.A., Professor of Mathematics and Chairman of the Department of Mathematics.
Davis, William King, M.A., Associate Professor of Biology.
Deckert, Verna Lee, M.A., Associate Professor of Art.
DeShazo, Elmer Anthony, Ph.D., Professor of Political Science; University Coordinator, International Programs.
Fisher, Margaret Elizabeth, Ph.D., Associate Professor of Home Economics.
Frier, Morris Aaron, M.S., Associate Professor of Mathematics.
Gary, Roland Thacher, Ph.D., Professor of Biology.
Gensberg, Frank, M.A., Assistant Professor of Health and Physical Education.
Gregg, Cecil Manren, Ph.D., Professor of Agriculture.
Grusendorf, Arthur August, Ph.D., Professor of Sociology.
Hahn, Cecil Oscar, Ph.D., Professor of History.
Haney, Lois May, M.A., Assistant Professor of English.
Harper, Mary Wanda, Ph.D., Professor of Home Economics and Chairman of the Department of Home Economics.
Hudson, Gertrude Reese, Ph.D., Professor of English.
Hunter, Mary Buchanan, M.A., Associate Professor of Music.
Jacks, Onah, Ed.D., Professor of Home Economics.
Johnson, Jesse Breland, Ph.D., Professor in General Business.
Krause, Saphrona Brown, M.A., Assistant Professor of Mathematics.
Lancaster, Dorothy Mearle, Re.D., Professor of Health and Physical Education.
Little, Azalee Russell, Ph.D., Professor of Home Economics.
Lowman, Robert Glen, M.A., Assistant Professor of Chemistry.
Lynch, Vernon Eugene, Ph.D., Professor of English.
McNeil, Norman Laird, Ph.D., University Professor of English.
Moore, Howard, M.A., Instructor in Economics.
Murphy, Retta, Ph.D., Professor of History.
Musgrave, Alvin William, Ed.D., Professor of Business Administration.
Norwood, Patrick Henry, Ph.D., Professor of Education.
O'Meara, Eileen Julia, M.A., Assistant Professor of English.
Parra, Archie Oliver, Ph.D., Professor of Chemistry and Dean of the School of Science.
Parr, Allie Carl, M.A., Associate Professor of Business Administration.
Porter, Milton Beverly, M.A., Associate Professor of Mathematics.
Rogers, J. Lloyd, Ph.D., Professor of Education and Dean of the School of Education.
Shepherd, Carrie Hester, M.Ed., Assistant Professor of Education.
Shields, Mayron, Ed.D., Professor of Management and Marketing.
Short, Gladys, M.S., Associate Professor of Home Economics.
Smith, Mamie E., M.A., Assistant Professor of English.
Taylor, Sue, M.A., Associate Professor of English.
Tulloch, Lynn Hardyn, Ph.D., Professor of Mathematics.
Walker, Ural Barr, M.A., Associate Professor of Mathematics.
Wallig, Herschel Chester, C.P.A., Assistant Professor of Business Administration.
Williams, Buford Wesley, Ed.D., Professor of Education.
Young, Ione Dodson, Ph.D., Professor of English.
Young, Leroy James, Ph.D., Professor of Agriculture.
Zedler, Empress Young, Ph.D., Professor of Special Education and Director of Speech, Hearing, and Language Clinic.
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SOUTHWEST TEXAS STATE UNIVERSITY
Undergraduate Admission Application

Southwest Texas State University welcomes your application for admission. Applicants must be academically eligible for admission before a housing application will be sent. Students with fewer than 60 semester hours credit are required to live on campus, unless granted an exemption by Residential Living. Final acceptance, with the right to register for classes, is granted when all admissions and housing requirements are fulfilled.

I. PERSONAL DATA:

<table>
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<tr>
<th>SS No.</th>
<th>Name</th>
<th>Last</th>
<th>First</th>
<th>Middle</th>
<th>Maiden</th>
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PERMANENT ADDRESS

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<th>County</th>
<th>State</th>
<th>Zip</th>
<th>Country</th>
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CURRENT MAILING ADDRESS (if different from above)

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<th>County</th>
<th>State</th>
<th>Zip</th>
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BIRTH DATE

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<th>Month</th>
<th>Day</th>
<th>Year</th>
<th>MARITAL STATUS</th>
<th>SEX</th>
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<td></td>
<td>Single/Married</td>
<td>Male/Female</td>
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If you are single, provide information on your parent (if living) or legal guardian. If you are married, provide information on your spouse.

NAME

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<th>Middle</th>
<th>Last</th>
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TELEPHONE NO. (  )

Did either of your parents attend SWT? yes no

ADDRESS

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<th>Street</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
<th>Parent’s Occupation</th>
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II. EDUCATIONAL DATA:

PROPOSED MAJOR ________ PROPOSED MINOR ________

HIGH SCHOOL GRADUATED FROM

<table>
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<th>Name</th>
<th>City</th>
<th>State</th>
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GRADUATION DATE ___________ YEARS ATTENDED _______ to _______ HIGH SCHOOL RANK 1st 2nd 3rd 4th (circle quarter)

How many college semester hours will you have completed upon enrollment at SWT?

Check one: 0 1-11 12-29 30-59 60-89 90+

LIST ACCREDITED COLLEGES AND UNIVERSITIES ATTENDED. You must be eligible to return to all previous institutions. An official transcript from each college attended must be submitted to SWT. Failure to list all institutions previously attended may result in dismissal from Southwest Texas State University.

<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>State</th>
<th>from semester/year</th>
<th>to semester/year</th>
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<tr>
<th>Name of college currently attending</th>
<th>Semester</th>
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Number of hours in progress ________ Phi Theta Kappa member? yes no

Degrees Completed

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FOR BEGINNING FRESHMEN: Have you taken the ACT? yes no

Have you taken the SAT? yes no

Date taken or planned ________

FOR FORMER STUDENTS: All former students reapplying for admission must indicate type of previous work taken at SWT: In Residence By Extension By Correspondence

Enrolled from/to: ________

III. RESIDENCY STATUS:

Have you been a resident of Texas for 12 months immediately prior to enrollment at any college or university? yes no

Has your parent or guardian (upon whom you are dependent) or your spouse been a resident of Texas for the past 12 months? yes no

If you answered no to either question, additional information may be requested by the Admissions Office for verification of your residency status.

I certify that I qualify for Texas Resident Fees

Non-Resident/Foreign Student Fees

<table>
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<tr>
<th>ETH</th>
<th>Non-Resident Alien/Foreign National</th>
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<th>Col T</th>
<th>Col Ed</th>
<th>Immunization</th>
<th>ACT</th>
<th>Sat</th>
<th>PARS TU</th>
<th>Class</th>
<th>ETH</th>
</tr>
</thead>
</table>

I certify that the above statements are true and complete and that I have not omitted any relevant information. I also certify that I will inform the SWT Admissions Office of any change in my residence or that of my parents (if under 18 or dependent) and any other changes in information which occur between now and the beginning date of the term for which I am applying. I acknowledge that deliberate omissions or falsifications subject me to the University’s disciplinary sanctions.

Signature

Date
Name ________________________________
Address ______________________________________
City ______________________________________
State __________ Zip Code __________

Director of Admissions
Southwest Texas State University
San Marcos, Texas 78666
The progressive university with a proud past.