# CAMERON UNIVERSITY 

## CHANGING LIVES FOR 100 YEARS, $1908=2008$



CATALOG 2007-2009

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## CAMERON

## U N I VERSITY

## $2007-2009$ C A T A L O G

## 2800 West Gore Boulevard Lawton, Oklahoma 73505

 disability, or status as a veteran in any of its policies, practices, or procedures. This includes, but is not limited to, admissions, employment, financial assistance, and educational services.
## PREFACE

This catalog provides information about the academic programs of Cameron University. It also contains information concerning admissions, academic regulations and requirements, services available to students, academic offerings and a list of the administrative officers and faculty of the University. While every effort has been made to make this catalog as complete and accurate as possible, changes may occur at any time in requirements, deadlines, fees, curricula and courses listed in this catalog. All such changes are effective at such time as the proper institutional authorities determine and may apply not only to prospective students but also to those who are already enrolled in the University. This catalog should not be construed as a contract between Cameron and any person.

The courses listed in a curriculum are required, but the display of a curriculum does not in any way indicate the length of time required for a student to finish degree requirements. Rather, this display is intended as a guide to indicate the preferred order for completion of degree requirements. Exceptions to certain requirements may be petitioned through proper academic channels.

Because this catalog was prepared well in advance of its effective date, the course descriptions may differ in some instances from actual content taught in some courses, due to advancements in the discipline or decisions to change the scope of the course. Thus, the descriptions that follow are not provided in the nature of a contractual obligation. Some of the newer courses and changes in courses are included in this catalog pending their approval by the Oklahoma State Regents for Higher Education. Consequently, students should consult the appropriate departmental advisor and refer to the class schedule for the offerings in any given academic session.

## ACADEMIC CALENDARS

Cameron University's academic calendar is approved by the president or his/her designee and submitted annually to the State Regents. The academic calendar shall describe any alternative schedules. Submission is due by January 1 prior to the summer semester to which the proposed calendar applies.

The uniform academic calendar for institutions in The Oklahoma State System of Higher Education consists of the fall and spring semesters and a summer term defined as follows:
A. The summer session begins about the last week in May or the first week in June and ends late July or early August.
B. The fall semester begins mid- to late August or early September, closing just prior to the Christmas vacation period.
C. The spring semester begins following the Christmas vacation in January and ends prior to the first of June.
D. Academic terms shorter than a traditional semester or summer session, generally referred to as "intersessions," may be conducted between semesters or between the summer session and spring and fall semesters. Block or alternative course schedules may also occur within the dates set forth for a semester or summer session.
The approved calendar is distributed to all departments and is included in the Enrollment Schedule each semester and summer session.

## OUTCOMES ASSESSMENT

Cameron University's comprehensive outcomes assessment program, mandated by the Oklahoma State Regents for Higher Education, consists of entry level assessment, general education assessment, program outcomes assessment, and student satisfaction assessment. Participation by students may be required as a condition of enrollment, continued enrollment, or graduation.

## CONTENTS

Page
Accreditation ..... 4
Degree Programs Offered ..... 5
General Information ..... 9
Admissions ..... 15
Academic Regulations ..... 20
Student Programs and Services ..... 27
General Education Requirements ..... 37
School of Business ..... 39
School of Education and Behavioral Sciences ..... 50
School of Liberal Arts ..... 79
School of Science and Technology ..... 144
Division of Support Services ..... 206
University Interdisciplinary Degrees ..... 206
Officers and Faculty ..... 218
Index ..... 232

## ACCREDITATION

Cameron University is accredited by THE HIGHER LEARNING COMMISSION, A COMMISSION OF THE NORTH CENTRAL ASSOCIATION OF COLLEGES AND SCHOOLS, 30 North LaSalle, Suite 2400, Chicago, Illinois 60602-2504.

The undergraduate and graduate degree programs offered by the School of Business are accredited by the ASSOCIATION OF COLLEGIATE BUSINESS SCHOOLS AND PROGRAMS (ACBSP), 7007 College Boulevard, Suite 420, Overland Park, Kansas 66211. The School of Business is also a member of the AACSB-THE INTERNATIONAL ASSOCIATION FOR MANAGEMENT EDUCATION, 600 Emerson Road, Suite 300, St. Louis, Missouri 63141-6762.

The Teacher Education programs at Cameron University are accredited by the State, OKLAHOMA COMMISSION FOR TEACHER PREPARATION, 4545 N. Lincoln Boulevard, Suite 275, Oklahoma City, Oklahoma 73105-3418 and by the NATIONAL COUNCIL FOR THE ACCREDITATION OF TEACHER EDUCATION (NCATE), 2010 Massachusetts Avenue, NW, Suite 500, Washington, D.C. 20036-1023. Approved graduates are recommended for teaching licenses in the elementary and secondary schools of Oklahoma.

The Bachelor of Arts in Music and Bachelor of Music Degrees offered by the Department of Music, are accredited by the NATIONAL ASSOCIATION OF SCHOOLS OF MUSIC, 11250 Roger Bacon Drive, Suite 21, Reston, Virginia 20190.

## The Computer Aided Design Drafting (A.A.S. Degree) curriculum is certified by the AMERICAN DESIGN DRAFTING ASSOCIATION, 105 E. Main Street, Newbern, Tennessee 38059.

The Medical Technology curriculum is accredited by the NATIONAL ACCREDITING AGENCY FOR CLINICAL LABORATORY SCIENCES (NAACLS) in cooperation with the COMMISSION ON ACCREDITATION OF ALLIED HEALTH EDUCATION PROGRAMS, 35 East Wacker, Suite 1970, Chicago, Illinois 60601-2208.

## EQUAL OPPORTUNITY

Cameron University is committed to the principles of equal opportunity and affirmative action and promotes an environment of awareness and understanding of culturally diverse groups in our society. The University strives to maintain a campus climate of mutual respect and tolerance that is free from discrimination. Discrimination is unlawful and undermines the freedom of students, faculty, and staff to productively learn and work at the University.

To obtain information about applicable laws or to file a complaint of discrimination, including harassment, on the basis of race, color, national origin, sex, age, religion, disability, or status as a veteran, contact Dr. Sylvia Burgess, Equal Opportunity Office, at 580-581-2946.
(Note: At time of printing, offices were under construction. For specific location and address of the Equal Opportunity Office, visit our website at www.cameron.edu/eoaa or call 580-581-2946).

## DEGREE PROGRAMS

Cameron University offers curricula leading to master's, bachelor's and associate degrees. The following bachelor's degrees are offered: Bachelor of Arts (B.A.), Bachelor of Music (B.M.), Bachelor of Science (B.S.), Bachelor of Accounting (B.Acctg.), and Bachelor of Fine Arts (B.F.A.). Associate of Science (A.S.) and Associate of Applied Science (A.A.S.) degrees are also offered. Associate and bachelor's degree programs include a general education requirement and a major or concentration. Bachelor's degree programs also include a minor (or major-minor) and electives. Development of expertise in a discipline occurs in the major courses; a minor broadens the student's education. General education provides the common experience and knowledge that characterize the academically educated person. Electives afford the opportunity for both exploration and continued study in areas of particular interest.

Students are responsible for meeting all degree requirements. It is essential that each student (1) become familiar with the requirements for the degree being pursued, (2) formally request substitutions or waivers of courses necessary to meet degree requirements, and (3) verify each enrollment to ensure the courses apply toward degree requirements, satisfy a prerequisite, or meet some mandated institutional requirement.

| Degree | Graduate Degrees* | Concentrations |
| :---: | :---: | :---: |
|  | Major |  |
| Master of Science | Behavioral Science | Alternate |
|  |  | Psychology |
|  | Educational Leadership |  |
|  | Entrepreneurial Studies |  |
| Master of Education | Education | Alternate Program |
|  |  | Elementary Education |
|  |  | Secondary Education |
|  |  | Literacy |
|  |  | Special Education |
|  |  | Teaching and Learning |
| Master of Business Administration | Business Administration |  |
| *See the Graduate | Catalog for details rega | masters degree progran |

## Undergraduate Degrees

| Degree | Major | Concentration |
| :--- | :--- | :--- |
| Bachelor of Arts | Art |  |
|  | English |  |
|  | English Education |  |
|  | History |  |
|  | Mathematics |  |
|  | Mathematics Education |  |
|  | Music |  |
|  | Political Science |  |
|  | International Languages |  |
|  | Romance Languages Education |  |

French
Spanish

| Degree | Major | Concentration |
| :---: | :---: | :---: |
|  | Social Studies Education Communications/Theatre | Communications Theatre |
| Bachelor of Science | Agriculture | Agriculture Mechanization <br> Agriculture Business <br> Management <br> Agronomy <br> Animal Science <br> Environmental Science |
|  | Biology | Biology <br> Botany <br> Cell/Molecular <br> Professional <br> Zoology |
|  | Biology Education |  |
|  | Chemistry <br> Chemistry Education <br> Computer Information Systems <br> Computer Science <br> Criminal Justice |  |
|  | Electronic Engineering Technology |  |
|  | Early Childhood Education |  |
|  | Elementary Education |  |
|  | Engineering Design Technology |  |
|  | Health Physical Education | Physical Education \& Health <br> Physical Education \& Safety <br> Sport/Fitness Management |
|  | Physical Education |  |
|  | Human Ecology | Family Science Human Ecology |
|  | Information Technology Interdisciplinary Studies Medical Technology Multimedia Design |  |
|  | Natural Science | Biology <br> Chemistry <br> Physics |
|  | Physics |  |
|  | Psychology |  |
|  | Sociology |  |
|  | Technology |  |


| Degree | Undergraduate Specialty Degrees | Concentrations |
| :---: | :---: | :---: |
|  | Major |  |
| Bachelor of Accounting | Accounting |  |
| Bachelor of Business Administration | Business Administration | Economics |
|  |  | Finance |
|  |  | General Business Administration |
|  |  | Management |
|  |  | Management Information Systems |
|  |  | Marketing |
| Bachelor of Fine Arts | Art | Graphic Design |
| Bachelor of Music | Music | Composition |
|  |  | Instrumental Music Education (Pre-certification) |
|  |  | Instrumental Performance |
|  |  | Piano |
|  |  | Vocal |
|  |  | Vocal/Keyboard |
|  | Undergraduate Associate Degrees |  |
| Degree | Major | Concentrations |
| Associate in Science | Business |  |
|  | Interdisciplinary Studies |  |
| Associate in Applied Science | Applied Technology |  |
|  | CAD Drafting |  |
|  | Computer Information Systems |  |
|  | Criminal Justice | Corrections |
|  |  | Law Enforcement |
|  | Early Child Education \& Care |  |
|  | Electronic Engineering Technology |  |
|  | Information Technology |  |
|  | Multimedia Design |  |
|  | Respiratory Care |  |

## NON DEGREE PROGRAMS

Pre-Professional Programs. Cameron University offers course work at the pre- professional level for such fields as medicine, dentistry, law, pharmacy, veterinary medicine and engineering.

The requirements for admission to specific professional schools vary considerably. Students should therefore consult the catalog of the professional school to which they plan to apply for admission for guidance in course selection. Departmental chairs at Cameron are familiar with the requirements of most professional schools and can assist in appropriate selection of courses.

## PROGRAM

Architecture
Dentistry
Engineering
Aero Space
Chemical
Civil
Electrical
Industrial
Mechanical
Law
Medicine
Pharmacy
Veterinary Medicine

## ADVISEMENT DEPARTMENT

Computing and Technology
Biological Sciences/Physical Sciences
Computing and Technology
Physical Sciences
Computing and Technology
Computing and Technology
Computing and Technology
Computing and Technology
Criminal Justice and Sociology
Biological Sciences/Physical Sciences
Biological Sciences/Physical Sciences
Agriculture/Biological Sciences/Physical Sciences

## THE HONORS PROGRAM

Cameron University's Honors Program (CUHP) supports and rewards academically advanced students by providing them with exceptional opportunities for learning both inside and outside the traditional classroom setting. CUHP students dramatically enrich their undergraduate experience by enrolling in teamtaught corses, participating in frequent field trips, exploring subjects from interdisciplinary perspectives, conducting independent research for presentation at conferences and/or publication, benefitting the community through service-learning projects, and discovering how to work collaboratively to define and resolve specific problems appropriate to their interests and areas of expertise. The CUHP also provides a central focus for the pursuit of academic excellence on the Cameron campus.

The CUHP offers honors sections of numerous courses that meet general education requirements; the program also works with faculty and interested students to set up honors options for many traditional courses. Additionally, all CUHP students must complete one interdisciplinary upper division honors seminar as well as two core colloquia (Great Ideas and Discoveries to 1500 and Great Ideas and Discoveries since 1500) that are taught by multiple faculty from different departments.

These courses and honors options are open to students with high levels of talent, preparation, and/or motivation. All students who have scored 25 or higher on the ACT are automatically eligible for admission into the CUHP and are encouraged to apply. Students whose test scores do not make them automatically eligible but who nevertheless want to make the most of their academic experience at Cameron are invited to apply to the program director for provisional admission. Typically, honors courses are small, discussionbased classes, and they are often augmented by field trips, museum visits, guest lectures, and technological enhancements. Full listings of honors course offerings are published regularly by the CUHP office. Honors course offerings are structured to encourage students to complete a significant portion of their general education requirements in honors courses and to encourage students to reconsider the interrelationship between disciplines and careers. The CUHP also encourages the development of high quality undergraduate research, honors capstone projects, and the development of honors degree tracks in the major disciplines. Successful completion of individual honors courses and or comprehensive honors program tracks will be acknowledged on the Cameron transcript.

The program also coordinates the activities of the Cameron honor societies and works to increase their visibility and to maximize their roles as hubs of academic leadership in the Cameron campus community. Membership in Cameron's honor societies is acknowledged each year during Convocation.

The aim of the CUHP to produce graduates who have gone farther, learned more, and become more capable of leadership both in the community and in a chosen field of study.

## DIPLOMAS AND TRANSCRIPTS

Cameron University views the diploma as a "ceremonial" document, suitable for display purposes. The document officially verifying completion of degree requirements is the transcript issued by the Registrar's Office.

## GENERAL INFORMATION

## HISTORY

The history of Cameron University corresponds to the history of the area it serves in Southwest Oklahoma. It was founded by the Oklahoma Legislature in 1908 as Cameron State School of Agriculture, one of six agricultural high schools in the state and placed under the jurisdiction of the State Commission of Agriculture and Industrial Education. The institution was named for E. D. Cameron, first State Superintendent of Schools.

Cameron added junior college work in 1927 when local needs demanded access to higher education. With the changed function came the name Cameron State Agricultural College. It became solely a college in 1941 when the Oklahoma State System of Higher Education was formed, and joined the group of institutions governed by the Board of Regents for Oklahoma A\&M Colleges.

Baccalaureate degrees were authorized in 1966 by the Oklahoma State Regents for Higher Education, following action by the Legislature. In May of 1970, the first bachelors degrees were awarded. The institution's name was changed to Cameron College in 1971, and was further amended to Cameron University in 1974.

In 1988, the State Regents expanded Cameron's functions to include offerings at the masters degree level. This change in function was the first granted to an Oklahoma institution since Cameron was given authority to offer bachelors degrees more than 20 years earlier. The first masters degrees were awarded to forty-one graduates in May of 1990 .

In recognition that Cameron's mission had become significantly more complex and predominantly urban, on June 1, 1992, the governance of the University was transferred by the Oklahoma Legislature to the governing board for the University of Oklahoma, the Board of Regents of the University of Oklahoma ("Board of Regents"). With the transfer of governance came new affiliations between Cameron and the University of Oklahoma, which have broadened and strengthened academic offerings by both institutions.

## WHO WE ARE

Cameron University is a regional, public university serving Southwest Oklahoma and a global learning community. The University is governed by The Board of Regents of The University of Oklahoma within a state system coordinated by the Oklahoma State Regents for Higher Education. Cameron.University offers associate, baccalaureate, and master's degree programs.

## MISSION STATEMENT

Cameron University provides a diverse and dynamic student body access to quality educational opportunities; fosters a student-centered academic environment that combines innovative classroom teaching with experiential learning; prepares students for professional success, responsible citizenship, life-long learning, and meaningful contributions to a rapidly changing world; and is a driving force in the cultural life and economic development of the region.

## INSTITUTIONAL PURPOSES

In pursuit of its mission, the University has established three areas of commitment and service, education for effective living, education for specialized fields of endeavor, and education through community service.

## 1. Education for Effective Living

Cameron University's program of education for effective living is designed to provide common experiences which are needed by all citizens. The program's objectives are to encourage the student to think clearly, creatively, and critically about those problems confronting the individual and society; to stimulate the student to seek more knowledge, develop more tolerance, and to acquire greater awareness of the world community; to assist the student in making contributions to the groups of which society is composed; and to foster within the student the desire to continue the pursuit of knowledge whereby a better understanding of self and society is afforded. The University seeks to facilitate these objectives through required general education courses in communications, mathematics, natural sciences, American history and political science, humanities, behavioral sciences, economics, physical activities, and through a program of student services.

## 2. Education for Specialized Fields of Endeavor

The purpose of specialized education is to develop the technical and professional competencies of individuals in order that they meet the demands and requirements of modern professions. The University is committed to specialized education in four realms:

## Baccalaureate Degree Programs

Baccalaureate degree programs provide for a comprehensive background and concentrated investigation in one or more disciplines. These curricula prepare the student for entrance into professions, for further professional training, or for graduate study. The University seeks to facilitate such objectives by offering curricula leading to the degrees of Bachelor of Arts, Bachelor of Science, and Bachelor of Specialty.

## Associate Degree Programs

The University recognizes that educational and occupational preparation in post-secondary programs having less than a baccalaureate objective is an essential part of meeting the objectives of the University and the needs of individuals and society. The University seeks to facilitate such objectives by offering curricula culminating in Associate in Applied Science Degrees and Associate in Science Degrees.

## Teacher Education

The purpose of the teacher education program is to assist in the development of effective members of the teaching profession. The University seeks to facilitate this objective by offering both course work and practical experiences in professional teacher education curricula and in specialized programs in Early Childhood Education, in Elementary Education, Secondary Education, and Elementary-Secondary Education. Students who have successfully completed these programs and have passed the state certification examinations, may be recommended to the State Department of Education for Oklahoma state teaching credentials at the early childhood, elementary, secondary, or elementary-secondary level..

## Graduate Degree Programs

The Graduate degree programs are designed to offer opportunities for advanced learning, professional preparation, economic enhancement, and personal development through concentrated and detailed study and research in any of several academic disciplines appropriate to persons living in Southwest Oklahoma. Cameron University facilitates such objectives by offering curricula leading to masters's degrees. For more information refer to the Graduate Studies Catalog at www.cameron.edu/graduate.

## 3. Education Through Community Service

The University serves individuals, businesses, industries, and professions in the service area by making available, on campus and in the community, facilities and personnel who organize, promote and participate in both credit and non-credit conferences, institutes, workshops and vocational and extension courses. In addition, individual University personnel serve as resource persons for the community. The University also provides facilities and personnel for lectures, musical and dramatic productions, art exhibits and intercollegiate athletics. The University supports research projects appropriate to the University and outside agencies.

## UNIVERSITY FUNCTIONS

The following functions are assigned to Cameron University by the State Regents for Higher Education:
-- To provide the educational programs of a senior college for the people living in the eleven counties of Southwest Oklahoma.
-- To provide a program of general education for all students designed to provide common experiences which are needed by all citizens if they are to live productively.
-- To provide programs of instruction in the liberal arts and sciences culminating in the awarding of Bachelor of Arts, Bachelor of Science or Bachelor of Specialty degrees.
-- To provide programs, involving both course work and practical experiences, designed to assist in the development of effective early childhood, elementary, secondary and elementarysecondary teachers.
-- To provide pre-professional course work and advisement for students planning to complete professional programs at other colleges and universities.
-- To provide post-secondary programs having less than a baccalaureate objective in technical and occupational education culminating in the awarding of Associate in Science and Associate in Applied Science Degrees.
-- To provide community services including programs of continuing education, both for credit and non-credit, cultural productions and special events designed to improve the intellectual, cultural, social, physical, moral, economic and occupational capacities of the people of Southwest Oklahoma.
-- To provide programs of instruction for military personnel, including those persons stationed at Fort Sill and other military installations in the region and those who desire to pursue Reserve Officers' Training programs.
-- To provide facilities, encouragement and financial support for faculty development and for faculty, student and constituent research projects.
-- To provide graduate level programs designed to offer opportunities for advanced learning, professional preparation, economic enhancement, and personal development culminating in Master's Degrees.

## SERVICEMEMBERS' OPPORTUNITY COLLEGE

Cameron University has been designated as a SERVICEMEMBERS' Opportunity College. Sponsored by the American Association of State Colleges and Universities, the SER VICEMEMBERS' Opportunity College Project (SOC) represents a commitment to education for the military. This network of institutions with similar admissions, transfer and residence requirements and policies allows service members to move from random educational activities into program-completion efforts. It allows maximum coordination of opportunities among institutions. Students with a SOC agreement must complete the degree requirements within seven years from issue date.

The four-year degree areas offered through Cameron University are: Accounting, General Business, Marketing, Management, Computer Information Systems, Computer Science, Criminal Justice, Communications Electronic Systems, Electronic Engineering Technology, English, History, Mathematics, Psychology, Sociology, Political Science and Interdisciplinary Studies.

The two-year degrees are: Criminal Justice, Computer Information Systems, Electronic Engineering Technology, Computer Aided Design Drafting, and Interdisciplinary Studies.

This program is coordinated through the Admissions Office.

## FINANCIAL INFORMATION

All students are charged a general fee which includes charges for registration, library and classroom and laboratory instruction. Special fees are charged for other services which are made available to students. The rates for both general and special fees are set by the Oklahoma State Regents for Higher Education and are subject to periodic review and revision.

Refer to the current Enrollment Schedule or contact the University Business Office for current fees and refund policies.

## FINANCIAL ASSISTANCE

Cameron has assistance programs in the form of scholarships, grants, loans, and employment.
Students intending to apply for financial assistance should contact the Office of Financial Assistance well in advance of the time to enter CU. Application materials may be obtained from the Financial Assistance Office or by going to the following website: http://www.cameron..edu/financial aid/apply.html.

## SCHOLARSHIPS

Each year a variety of scholarships are awarded to Cameron students. The scholarships are made available by the State of Oklahoma, Cameron University, and private organizations through Cameron.

Scholarships are awarded on a competitive basis and based upon scholastic ability, financial need, demonstrated talent in individual studies, leadership, athletics or fine arts.

For additional information, applicants should contact the Financial Assistance Office, the Director of Admissions, or Chair of the department in the area in which the scholarship is desired.

Additional scholarships can be found on the Financial Assistance website: http://www.cameron.edu/financial aid/scholarships.

## PRESIDENTIAL LEADERS/UNIVERSITY SCHOLARS (PLUS)

A limited number of PLUS Scholarships are awarded to entering freshman students who have demonstrated a high degree of leadership and scholarship ability. The PLUS Scholarship is a four year tuition waiver and room scholarship available to residents of the State of Oklahoma. Interested applicants should fill out the Cameron University Scholarship application form available in the Admissions Office of Cameron University. Deadline date for consideration is February 1.

## NATIVE AMERICAN TRIBAL SCHOLARSHIPS/GRANTS

Individual native American tribes provide annual scholarship grants to Indian students to attend college. In order to qualify students should contact their tribal office for instructions and availability of grants. Most tribal offices will then require students to make application through the University for a need analysis. It is recommended that students desiring assistance contact their tribal office as early as possible for information and deadline dates.

## REHABILITATION SCHOLARSHIPS

Vocational Rehabilitation Office, offers tuition and book scholarships to students with mental, physical or emotional disabilities. The local office is located at 1324 NW 53rd, Lawton, Oklahoma. Their telephone number is (580) 353-8300. If you are interested, you should call and make an appointment with them to find out if you qualify.

## PRIVATE ORGANIZATION SCHOLARSHIPS

Students should explore the availability of scholarships offered by their home town civic, service and fraternal organizations.

## ARMY ROTC SCHOLARSHIP PROGRAM

*Four-, three-, and two-year Army Reserve Officers' Training Corps scholarships are available and awarded on a competitive basis to help outstanding young people pay for their college education while completing requirements for a commission in the United States Army.

A U.S. Army ROTC scholarship will provide financial assistance toward college tuition and educational fees. Additionally, students receive funds to purchase textbooks, classroom supplies and equipment. Army ROTC scholarship winners also receive a tax-free subsistence allowance each month for up to 10 months a school year and are paid while attending the ROTC Leader Development and Assessment Course.

During the period of their scholarship, recipients may, if qualified, receive any portion of the Montgomery GI Bill/Army College Fund or Veterans Educational Assistance Program (VEAP) benefits they earned while on active duty.
*Cameron University non-scholarship students who participate in the Army Reserve Officers' Training Corps Simultaneous Membership program (Reserve/National Guard) are eligible to earn tuition assistance from the Army Reserves/National Guard.
*Additional smaller scholarships that are awarded to students enrolled in the ROTC program include: Armed Forces Communication and Electronic Association General Creighton Abrams General Melvin Zais
Pentagon Federal Credit Union
United Services Automobile Association and SPRINT
Colonel Jack Wolfson
Further information is available at the Military Science Department.

## STUDENT EMPLOYMENT

Cameron University offers employment to a limited number of students each year in the campus laboratories, offices, residence halls and library.

Employment eligibility is determined by financial need. Students seeking employment on campus should fill out a financial aid application (FAFSA). Vacancy listings of on-campus jobs are available at http://www.cameron.edu/financial_aid/workstudy.html. Off-campus job vacancies are listed in the Career Services Center.

## GRANTS

Federal and state funds are available through Cameron University in the form of educational grants (Pell, SEOG, ACG, SMART and OTAG) to help students with exceptional financial need to pursue a course of undergraduate study. The student must be enrolled or have been accepted for enrollment and must show the ability to maintain good academic standing.

The grant amounts vary depending on (1) financial need and (2) amount of assistance provided from non-federal grants, scholarships, loans and student employment. The student must be enrolled in an eligible program leading to a degree or certificate. Applications may be obtained from the Office of Financial Assistance, Cameron University, Lawton, Oklahoma 73505, or at the following website: http://www.cameron.edu/fiinancial aid/apply.html.

LOANS
Cameron University is a participant in the Federal Stafford Student Loan Program. If all federal requirements are met, an applicant who is an undergraduate or a graduate student in an eligible program can borrow money for educational expenses.

Applicants must be enrolled or be accepted for enrollment on at least a half-time basis and show evidence of ability to maintain satisfactory academic progress. Repayment and interest requirements will depend upon the type of loan applied for and current federal guidelines.

For detailed information about each loan and the required application form, please contact the Office of Financial Assistance.

## VETERANS BENEFITS

Cameron University is certified by the Oklahoma State Accrediting Agency to the Veterans Administration (VA) as an approved training institution for certain veterans, eligible dependents or survivors and active service members who qualify for federally-enacted education benefits administered by the VA.

Cameron University's Veterans Affairs Office (VAO) provides assistance and information on application for benefits, available programs, admission and enrollment, general advisement and counseling atten special tutorial services. A primary function of VAO is the certification of student enrollment and and related VA VA. Eligible students are encouraged to use VAO services in matters pertaining to school Initiotion
Veterans Affairs Office. Stion of VA education benefits are accomplished by eligible students through the University and a request fudents must submit paperwork indicating an intent to enroll at Cameron each semester. It is the respassistance with veterans benefits at least ten weeks prior to the beginning of semester.

## ADMISSIONS

Requirements for admission to Cameron University are established by the Oklahoma State Regents for Higher Education.

For admission requirements for Graduate Studies, contact the Office of Graduate Studies at 580-5812987 or www.cameron.edu/graduate.

Associate of Science and Baccalaureate Degree Admission Requirements: Minimum admissions requirements are as follows:

- graduate of an accredited high school or possess a GED (student's high school class must have graduated) minimum composite ACT of 20 or SAT of 890 OR rank in the top 50 percent of high school graduating class and have a high school (4 years) grade point average of at least 2.7.
- meet the minimum high school curricular requirements:

4 years of English (grammar, composition, literature)
3 years of mathematics (Algebra I and higher level mathematics)
2 years of lab science (may not include general science)
3 years of history and citizenship skills (including 1 year of American History and 2 additional years from the subjects of history, economics, geography, government, non-western culture)
3 years of other (additional subjects previously mentioned or selected from computer science, foreign language)

Graduates of unaccredited high schools or home study programs, whose high school class has graduated, may satisfy admissions requirements by taking the ACT or SAT and achieving a minimum ACT score of 20 or SAT of 890 and satisfying the curricular requirements as certified by the school or for home study, the parent.

Individuals meeting these criteria are eligible for admission to baccalaureate, associate of science, or associate of applied science degrees.

Associate of Applied Science Admissions Requirements: Minimum admissions requirements are as follows:

- graduate of an accredited high school or possess a GED (student's high school class must have graduated)
- completed the ACT or SAT test

Students lacking curricular requirements may be required to take remedial/developmental courses. These courses must be completed within the first 24 semester hours attempted, with a grade of " C " or higher and prior to taking courses in the discipline. To transfer to an associate of science or baccalaureate degree program the student must meet both the curricular and performance admission requirements.

Non-Degree Seeking Student: A student who does not plan to pursue a degree may enroll in a maximum of nine semester hours without submitting academic credentials or meeting the academic curricular or performance requirements. Enrollment in mathematics and English courses will be determined by placement tests. Enrollment beyond nine hours will require formal admission.

Alternative Admission: This admission category is for those individuals who do not meet the performance or curricular requirements, but (1) have a reasonable chance for academic success, (2) have unusual talent or ability in art, drama, music, sports, and the like, or (3) are educationally or economically disadvantaged and show promise of being able to succeed in a program or curriculum at Cameron. Students applying for admission under this section should contact the Admissions Office for additional information.

Adult Admission: Students who are 21 years of age or older or active duty military who have graduated from high school or have a GED are eligible for admission to Cameron. Adult students with
curricular deficiencies must clear these by (1) successfully completing zero-level courses, (2) achieving a satisfactory score on the ACT or other appropriate examination in each area of deficiency, (3) exhibiting the ability to succeed in college-level course work as determined by placement testing, or (4) receiving a positive evaluation of his/her education and experience.

Opportunity Admission Category: Students who have not graduated from high school whose composite standard score on the American College Test places them at the 99th percentile of all students using Oklahoma norms or whose combined verbal and mathematical score on the Scholastic Aptitude Test places them at the 99th percentile of all students using national norms may apply for admission to Cameron. Admission will be based on the test scores, evaluation of the student's level of maturity and ability to function in the adult college environment, and whether the experience will be in the best interest of the student intellectually and socially.

International Students and Students for Whom English is a Second Language Admission: International students are required to meet the equivalent academic performance standards listed above. Additionally, students for whom English is a second language will be required to present evidence of proficiency in the English language prior to admission. Applicants for first-time admission (less than 24 semester hours at a regionally accredited U.S. institution of higher education) at the undergraduate level must present a score of 500 or higher on the TOEFL test or a score of 173 or higher on the computer-based TOEFL in order to meet the standards for unqualified admission to Cameron. Contact Admissions Office for additional information.

Concurrent Enrollment of High School Students: A senior student enrolled in an accredited Oklahoma high school may be admitted provisionally if the following criteria are met. The student must:

- Earn an ACT composite score of 20 or higher or have a high school grade point average of 3.0 and rank in the top $50 \%$ of senior class.
- Provide a signed statement from the high school principal stating the senior high school student will be able to satisfy high school graduation requirements (including curricular requirements for college admission) no later than the spring semester of the senior year.
- Provide a letter of recommendation from high school counselor.
- Provide written permission from parent(s) or legal guardian stating the high school senior may enroll concurrently.
- Be enrolled in less than a full-time load (fewer than six courses per semester) at the high school as attested by the high school principal.
- Meet ACT subscore requirements for enrollment (no secondary testing is permitted).

An eleventh grade student enrolled in an accredited high school may be admitted provisionally if the following additional criteria are met. The student must:

- Earn an ACT composite score of 23 or higher or have a high school grade point average of 3.5.

A student receiving high school level instruction at home or from an unaccredited high school may be admitted provisionally if the following criteria are met:

- Student is 17 years of age or older and meets the requirements of the $50^{\text {th }}$ percentile on standardized test (ACT/SAT).
- Student is 16 years of age and meets the requirements of the $72^{\text {nd }}$ percentile on standardized test (ACT/SAT).

Maximum load, including high school and college courses, for concurrently enrolled students is 19 semester hours. One high school course is equivalent to three semester hours. Contact the Admissions Office for complete information on the concurrent program.

## Transfer Admission

Transfer applicants must submit official transcripts from ALL colleges attended. An undergraduate student with more than six attempted semester hours, excluding zero-level courses or pre-college work and excluding credit hours accumulated by concurrently enrolled high school students is considered a transfer student.

Transfer From Other Oklahoma State System Institutions: A student may transfer to Cameron from another State System institution under the following conditions:

- The student originally met both the high school curricular requirements and academic performance standards for admission to Cameron and has a grade point average high enough to meet Cameron's retention standards, or
- The student originally met the high school curricular requirements but not the academic performance standards for admission to Cameron and has a grade point average high enough to meet Cameron's retention standards based on at least 24 attempted semester hours of regularly graded (A, B, C, D, F) college work, or
- The student originally met the performance but not the curricular requirements for admission to Cameron and has removed curricular deficiencies, or
- The student originally met neither the curricular nor the academic performance requirements for admission to Cameron, but has a grade point average high enough to meet Cameron's retention standards based on at least 24 attempted semester hours of regularly graded (A, B, C, D, F) college work and has removed curricular deficiencies.

Transfer From an Out-of-State Institution: In addition to meeting Cameron's entrance requirements, out-of-state transfers must meet the following:

- Be in good standing in the institution from which s/he plans to transfer.
- Have made satisfactory progress (an average grade of " C " or better or met Cameron's retention standards, whichever is higher) in the institution from which s/he plans to transfer.
- Students transferring from institutions not accredited by a regional association may have credits transferred by meeting the Oklahoma State Regents for Higher Education requirements.

Admission of Students Suspended From Other Institutions: A student suspended for academic reasons from other institutions may appeal for admission to Cameron. Information regarding this policy and appeal procedures may be obtained from the Admissions Office.

Transfer Probation: Students who do not meet the academic criteria including curricular requirements as stated above under the transfer categories, but who have not been formally suspended, may be admitted as "transfer probation" students. If grade point average (GPA) is less than 2.0 , student will be admitted as a "transfer probation" student. Students seeking admission in this category must meet with an Admissions Officer regarding procedures and enrollment conditions.

## Admission of Oklahoma State System Associate of Arts and Associate of Science

Graduates: Students who have completed the requirements for an Associate of Arts or Associate of Science degree at an Oklahoma State System institution will be accepted as having fulfilled the general education requirements for bachelor of arts or bachelor of science degrees. Additional requirements will be required when (1) prerequisites for upper division courses are lacking, (2) grade levels required by Cameron have not been attained, or (3) professional licensing or certifying agencies requirements exceed the junior college general education requirements.

Re-Admission: Any former Cameron student who did not attend Cameron during the previous academic year must apply for readmission.

## Placement Tests

Cameron University uses ACT scores to determine placement in English, mathematics, reading and science courses for first-time entering freshmen. Students with an ACT score of less than 19 in English,
mathematics, or reading are required to take a remedial course in the subject area or be approved for placement in a collegiate level course based on performance on computerized placement tests (CPT). Students with an ACT of less than 19 in science will be required to remediate any mathematics or reading performance deficiencies prior to taking a science course and will be required to complete three science courses to meet baccalaureate degree requirements.

CPT's are required to place adult students in English and mathematics courses and to recommend placement in reading courses.

Remedial courses used to remove performance deficiencies are not college level courses; therefore, they do not apply toward any degree requirement. A special fee is assessed for these courses in addition to normal tuition and fees.

## Falsification and Ownership of Records

Falsification of any admission record, whether by change, omission, or untrue statement will be grounds for permanent denial of admission to the University or suspension from the University with forfeiture of any credit earned.

All records required for admission (ACT/SAT scores, GED and transcripts) become the property of Cameron University.

## Name Change

A student who has legally changed his/her name must provide appropriate documentation to substantiate the change. This documentation is to be submitted to the Registrar's Office. All transcripts are issued under the student's legal name as recorded in the Registrar's Office.

## ADMISSIONS RESIDENCE STATUS

## Definitions

1. Resident of Oklahoma -- A resident of Oklahoma is one who has lived continuously in Oklahoma for at least 12 months duration and whose domicile is in Oklahoma. A person's domicile is his/her true, fixed, permanent home or habitation. It is the place where he/she intends to remain and to which he/she expects to return. A person can have more than one residence, but only one domicile. Domicile has two components--residence and the intention to remain. When these two occur there is a domicile.
2. Independent Person -- An independent person (for admissions purposes) is one enjoying majority privileges (or is legally emancipated from the parental domicile) and who is responsible for his/her own care, custody, and support. (This definition does not apply to financial aid.)
3. Dependent Person -- A dependent person (for admissions purposes) is one who is under the care, custody, and support of a parent or other legally sanctioned parental surrogate.
4. Full-Time Student --A full-time undergraduate student is one enrolled in a minimum of 12 credit hours per semester in an academic year or a minimum of 6 credit hours in a summer session. A full-time graduate student is one enrolled in a minimum of 9 credit hours per semester in an academic year or a minimum of 4 credit hours in a summer session.

## Independent Persons (definition for admissions purpose-does not apply to financial aid)

If a person enjoying majority privileges and who is independent of parental domicile can provide adequate and satisfactory proof of his/her having come to Oklahoma with the intention of establishing domicile, he/she may be granted resident student classification at the next enrollment occurring after expiration of 12 months following the establishment of domicile in Oklahoma. The spouse of such person must establish proof of domiciliary status on a separate basis.

## Dependent Persons (definition for admissions purpose)

The legal residence of a dependent person is that of his/her father; or that of his/her mother if his/her father be not living or if the parents are separated and the dependent person habitually resides with the mother; or, if both parents are dead, that of his/her legally appointed guardian or anyone else with whom he/she habitually resides in the absence of formal legal designation. A dependent person may become emancipated (freed from his/her parental domicile) through marriage, formal court action, abandonment by parents, or positive action on his/her own part evidential of his/her alienation of parental domicile. To qualify under the latter category, a dependent person must have completely separated himself/herself from the parental domicile and have proved that such separation is complete and permanent. Mere absence from the parental domicile is not proof of its complete abandonment. If an applicant can provide adequate and satisfactory proof of complete emancipation and his/her having come to Oklahoma with the intention of establishing domicile, he/she may be granted resident student classification at the next enrollment occurring after expiration of 12 months following establishment of domicile in Oklahoma.

## Foreign Nationals

An individual who is not a United States national may become eligible for classification as an Oklahoma resident provided that he/she holds "permanent resident status" as defined by the Immigration and Naturalization Service, evidenced by whatever documents may be required under applicable Federal law, who has resided in Oklahoma for a least 12 consecutive months and who meets the criteria for establishment of domicile as set forth in the policy of the State Regents for Higher Education.

## Military Personnel

A student attending an institution while on full-time active duty in the armed forces is considered as having a temporary residence in the state in which $\mathrm{s} / \mathrm{he}$ is attending school; therefore, a student neither gains nor loses resident status solely by such military service. Members of the armed services stationed in Oklahoma, their spouses and dependent children shall be admitted without the payment of non-resident tuition so long as they continue to be stationed in the state in the full-time military service and under military orders.

## Proof of Residence

The burden of proof of establishing Oklahoma residence or domicile shall be upon the applicant. Some of the various types of evidence that may serve as proof of one's residence status are year-round residence, ownership of property, registration for and voting in state general elections, filing an Oklahoma income tax return for the most recent calendar year, and payment of ad valorem property taxes. Since residence or domicile is at least partially a matter of intent, each case will be judged on its own merits, and no definitive or "magic" set of criteria can be established as sufficient to guarantee classification as a resident of Oklahoma.

## Reclassification

In addition to the aforementioned criteria, an independent person seeking to be reclassified as a resident of Oklahoma must meet the following criteria for the current and immediately preceding year:

1. The person must not have been claimed as an exemption for state and federal tax purposes by his/her non-resident parents.
2. The person is self-supporting as evidenced by having provided the majority of funds for his/her own upkeep.
3. The person must have maintained a continuous residence in Oklahoma for the period set forth above.

## ACADEMIC REGULATIONS

1. Requirements for Graduation.

- Completion of the specified degree requirements with a minimum retention/graduation grade point average of 2.0 and a minimum retention/graduation grade point average of 2.0 in all work taken at Cameron University.
- Baccalaureate degree candidates must satisfactorily complete a minimum of 30 semester hours in residence at Cameron University. At least 15 of the final 30 hours applied toward the degree or at least 50 percent of the hours required by the institution in the major field must be satisfactorily completed at the awarding institution.
- Associate degree candidates must complete a minimum of 15 semester hours in residence at Cameron University.
- Baccalaureate degree candidates must complete a minimum of 60 semester hours, excluding physical education activity courses, at a baccalaureate degree-granting institution, 40 semester hours of which must be upper-division excluding physical education activity courses.
- Baccalaureate degrees must include a liberal arts and science component as follows: bachelor of arts, 80 semester hours minimum; bachelor of science, 55 semester hours minimum; and bachelor of specialty, 40 semester hours minimum.
- Note: Some degrees have requirements in addition to these University requirements. Consult the specific degree for a listing of any such requirements.
See the Graduate Studies Catalog for information about the requirements for masters degrees. Graduate Studies Catalog is available online at www.cameron.edu/graduate.

2. Grade Point Averages.

Cumulative Grade Point Average. The ratio of total grade points to the total grade point earning hours attempted throughout a student's undergraduate career excluding remedial/developmental courses. It is calculated by dividing the total grade points earned by the total grade point earning hours attempted. Credit hours to which an "I", "W", "S", "U", "AU", "P", or "AW" has been assigned are not grade point earning hours.
Retention/Graduation Grade Point Average. The ratio of grade points earned to the total grade point earning hours attempted excluding remedial/developmental courses, "forgiven" courses, "reprieved" courses, and physical education activity courses.
3. Graduation Under a Particular Catalog. Curricular requirements for baccalaureate and associate degrees can be changed for students who complete those degrees within six years of the first date of enrollment at Cameron only to the extent that such changes do not delay graduation or add additional hours to the program.
4. Major Requirements. A minimum of one-half of the upper-division credits required for a major must be earned in residence at Cameron University. The dean of the school responsible for the major, acting upon a written request from the student accompanied by a statement from the student's advisor and the chair of the department responsible for the major, may approve an exception to this regulation. The applicability of major courses, taken before the major was declared, is determined by the dean of the school responsible for the major.
5. Transfer Credit from Regionally Accredited Colleges and Universities. Semester hours transferred from accredited colleges and universities are equated on a one-to-one basis. Quarter hours are equated on the basis of three quarter hours to two semester hours. The maximum number of lower division hours transferred from non-baccalaureate degree granting institutions which may be applied toward baccalaureate degree requirements is equal to the total hours required for the degree less 60 . Responsibility for determining the applicability of transfer credits to meet major or minor requirements rests with the dean of the school offering the major or minor. This responsibility may be delegated to department chairs or faculty members under the supervision of the dean. The Vice President for Academic Affairs is ultimately responsible for determining the applicability of transfer credits to meet general education requirements. The Vice President for Academic Affairs may designate faculty members or admissions personnel to assist with this function.
6. Concurrent Enrollment. A student seeking a degree at Cameron who desires to earn credits concurrently at another institution or through correspondence, must secure approval from the dean of the school (at Cameron) responsible for the major prior to taking the course if the credits are to be used to meet degree requirements.
7. Correspondence Credit. Credit earned through correspondence offered by regionally accredited institutions may be applied toward degree requirements upon recommendation by the student's advisor with approval of the department.chair of the student's major and the dean responsible for the major.
8. Second Baccalaureate Degree. A student may receive a second baccalaureate degree upon completion of (1) a minimum of 30 semester hours beyond the first degree with at least 15 of the hours in residence at Cameron, (2) a total of at least 30 semester hours in residence at Cameron, (3) the requirements for an additional major, and (4) the U.S. History and American Government requirements.
9. Second Associate Degree. A student may receive a second associate degree upon completion of a minimum of 15 semester hours in residence at Cameron University in addition to the hours required for the first degree, provided the requirements for the degree are met.
10. Double Majors. Students may have more than one major listed on their transcripts, provided they complete all of the requirements for each of the majors. A student seeking two majors must designate one of the majors as the "first major." The degree awarded will be determined by the designated "first major." Students fulfilling all of the requirements of a "second major" are not required to complete a minor.
11. Duplicate Use of Courses. Credits earned in a particular course may not be used to fulfill the requirements of two different majors or of both a major and a minor. Should the same course be required in each of a student's majors or in both his major and minor (See "Double Majors"), a student will be expected to complete an additional elective course in the discipline in which the duplication occurs.
12. Graduation Application. Each candidate for a degree shall file a graduation application with the Office of the Registrar the semester or summer session prior to the session in which the student expects to graduate.
13. Presence at Commencement Exercises. An annual commencement exercise is conducted at the end of the spring semester. Students who complete graduation requirements that semester or at the end of the preceding fall semester and those who apply to graduate at the end of the following summer session or following fall semester, are invited and encouraged to attend.
14. Recognition of Honor Graduates. Graduating baccalaureate and associate degree candidates with superior academic records are accorded special recognition by the University. A student who has achieved a cumulative grade point average of 4.00 graduates "summa cum laude," one whose cumulative grade point average is less than 4.00 but is 3.80 or above and is in the top five percent of the graduating class graduates "magna cum laude," and one whose cumulative grade point average is between 3.60 and 3.80 and is in the next ten percent of the graduating class graduates "cum laude." These honors are listed on official Cameron University transcripts, and honor graduates are formally recognized at the commencement.
15. Academic Load. Academic load includes all courses (concurrent enrollment, day, evening, workshops, off-campus) in which a student is enrolled.

- The normal academic load for a regular semester is 16 semester hours and for a summer or eight-week session is eight semester hours.
- The maximum load that a student will normally be permitted to carry is 18 semester hours during a regular semester or 9 semester hours during a summer or eight-week session.
- A student who has attained an overall grade point average of 3.00 and has completed a minimum of 15 semester hours will be permitted to enroll in 21 semester hours during a regular semester or 10 semester hours during a summer or eight-week session.
- All other overloads must be recommended by a student's faculty advisor and approved by the dean of the school responsible for the student's major.
- The credit hour load that may be approved for a regular semester, summer session, eight-week session, or short course can never exceed one and one-half times the number of weeks in the semester, summer session, eight-week session, or short course.

16. Full-Time Student. A student who enrolls in 12 or more hours during a regular semester or 6 or more hours during a summer or eight-week session is classified as a full-time student.
17. Classification of Students. Freshman are those students who have less than 30 semester hours of credit; sophomores, those with 30 or more semester hours, but less than 60 ; juniors, those with 60 or more semester hours, but less than 90 ; and seniors, those with 90 or more semester hours who have not received a degree. Students who are non-degree seeking at Cameron University are classified as "special students."
18. Enrollment. Students may enroll for courses during designated times which are listed in the Enrollment Schedule, published each semester and summer session. To receive credit for a course, a student must enroll prior to taking the course.
19. Late Enrollment. Enrollment after the first full week of classes in any semester, summer or eight-week session or proportionate period of a special schedule is a late enrollment. Late enrollments require permission from the dean(s) responsible for the course(s) in which a student wishes to enroll. Any student enrolling late will be responsible for making up all work of the classes in which $\mathrm{s} / \mathrm{he}$ enrolls.
20. Changing Course Schedules. Student schedule changes are processed in the Registrar's Office or departmental offices.

- Adding Courses. The first day of the second week of classes of a regular semester, summer or eight-week session or proportionate period of a special schedule is the last day a course may be added.
- Dropping Courses. Courses dropped during the first week of a regular semester, summer or eight-week session or proportionate period of a special schedule, will not be recorded on a student's academic record.
Courses dropped after the first week and prior to the end of the twelfth week of a regular semester or proportionate period of other sessions will be recorded on a student's academic record with a course status symbol of "W."
Courses dropped after the twelfth week of a regular semester or proportionate period of other sessions and prior to the end of the fourteenth week of a regular semester or proportionate period of other sessions will be recorded on a student's academic record with a symbol of "W", or grade of " F ", as assigned by the instructor.
Courses may not be dropped after the fourteenth week of a regular semester or proportionate period of other sessions.

21. Auditing. A student may enroll in a credit course as an auditor on a non-credit basis with the permission of the instructor teaching the course. Enrollment is done in the normal manner with the indication that it will be an audit. Auditors are not held responsible for the work expected of regular students and receive no grade or credit for the course. Test participation is the prerogative of the instructor. A student who audits a course agrees that s/he will not petition or ask in any way for the privilege of taking an examination to obtain credit after auditing the course. A student enrolled as an auditor may change the enrollment from audit to a credit enrollment within the first week of a regular semester, summer or eight-week session or proportionate period of a special schedule, with the permission of the instructor. A student enrolled for credit may change the enrollment to audit within the first eight weeks of a regular semester or proportionate period of other sessions only, with the permission of the instructor.
22. Attendance. A student is responsible for the content of each course in which $\mathrm{s} / \mathrm{he}$ is officially enrolled. At the beginning of each course the instructor will define and quantify attendance standards, procedures for verifying unavoidable absences, and methods of dealing with missed assignments and examinations. Instructions for dropping courses without an entry on a student's academic record (see regulation 20) will be stated in writing and distributed to students prior to the end of the period. It is a student's responsibility to note these instructions and follow them consistently and carefully.
23. Withdrawing from the University. Non-attendance or ceasing to attend a class does not constitute official withdrawal. To officially withdraw from the University, follow the procedures listed in the Enrollment Schedule published for each semester and summer session. It is a student's responsibility to complete the withdrawal process. Grades will be assigned in accordance with regulation 20. A student may not withdraw during the last two weeks of a semester or proportionate period of other sessions. If because of unavoidable circumstances a student is unable to personally complete the withdrawal process, he/she should contact the Registrar's Office by mail or by phone for assistance.
24. Credits. Credits are given in semester hours. A semester hour consists of one hour ( 50 minutes) of class work or a minimum of two hours of laboratory work per week for a regular semester.
25. Course Number System. Course numbers are four digits. The first digit indicates the class year in which the subject is ordinarily taken. A zero in the first digit indicates a non-college level course. The last digit indicates the credit hours awarded for the course. The two middle digits identify the course within the department. For example a course numbered 2013 is a sophomore course carrying three semester hours of credit.
26. Prerequisites. Enrollment in some courses is restricted to students who have taken certain other courses, who have attained a particular class standing, who have obtained the consent of the
department, or who are pursuing a particular major or majors. Prerequisites are listed with the course descriptions.
27. Grading System. Academic performance is evaluated using the marks shown in the following table.

| GRADES USED IN CALCULATING GRADE POINT AVERAGE |  |  | GRADES NOT USED IN CALCULATING GRADE POINT AVERAGES |  |
| :---: | :---: | :---: | :---: | :---: |
| GRADE | NOTE | PTS/HR | GRADE | NOTE |
| $\begin{aligned} & \text { A } \\ & \text { B } \\ & \text { C } \\ & \text { D } \\ & \text { F } \end{aligned}$ | EXCELLENT GOOD AVERAGE BELOW AVERAGE FAILURE | $\begin{aligned} & 4 \\ & 3 \\ & 2 \\ & 1 \\ & 0 \end{aligned}$ | $\begin{aligned} & \mathrm{S} \\ & \mathrm{U} \\ & \mathrm{P} \\ & \mathrm{NP} \end{aligned}$ | SATISFACTORY UNSATISFACTORY <br> PASS <br> NO PASS |
| SYMBOLS USED TO INDICATE COURSE STATUS |  |  |  |  |
| SYMBOL | NOTE |  | SYMBOL | NOTE |
| I <br> AW <br> AU | INCOMPLETE <br> ADMINISTRATIVE WITHDRAWAL AUDIT |  | $\begin{aligned} & \mathrm{W} \\ & \mathrm{NR} \\ & \mathrm{X} \\ & \hline \hline \end{aligned}$ | WITHDRAWAL GRADE NOT REPORTED THESIS IN PROGRESS |

"S" and "U" Grades. The grades of S (satisfactory) and U (unsatisfactory) may be used in grading eertain courses at the discretion of the instructor offering the course, with prior approval of the department chairman. When a course is selected for S-U grading, the entire class must be graded on the same basis. The grade of " S " also will be used to indicate passing in a credit course transferred to Cameron in which no letter grade has been assigned, and to designate awarded advanced standing credits.
"W" Symbol. A "W" may be awarded only if the student initiated and completed withdrawal from a course.
"AW" Symbol. An "AW" is assigned by the Vice President for Academic Affairs to indicate that the student was administratively withdrawn for disciplinary or financial reasons or inadequate attendance.
"I" Symbol. An incomplete may be given (at an instructor's discretion) to a student whose grade average is passing, but who did not complete a course at the end of a term. Students who receive an " I " will have no more than one year from the end of the semester in which the course was taken to complete the required work for the course. The instructor shall record the conditions and time limit for removing the " I " on the grade roster that is filed with the Office of the Registrar.
28. Changing an "I". It is the responsibility of the student to satisfy the requirements specified by the instructor at the time of the assignment of the "I". It is the responsibility of the instructor to submit a "Grade Correction" form to the Registrar. Students who receive an " I " will have no more than one year from the end of the semester in which the course was taken to complete the required work for the course. During that year, the student is not permitted to re-enroll in the course. If by the end of the year no change in grade has been submitted, the grade of " I " will become permanent. After a grade of " I " has become permanent, a student may re-enroll in the course. In no case will an "I" be changed to a grade of " $F$ " after a student has graduated.
29. Changing Grades Reported in Error. The only reason to change a grade is to correct a grade reported in error. The instructor who submitted final grades may make such a change by submitting to the Registrar a "Grade Correction" form signed by his/her chair and dean. In the event of the instructor's
absence, death, or disability, the grade may be changed by someone authorized by the President of the University with the advice of the Academic Appeals Committee to act in the instructor's behalf.
30. Repeating Courses. Repeating a course does not remove the previous grade from the student's record. However, repeated course credit hours may not be counted toward graduation requirements unless a course is so identified in the course description.
31. Scholastic Requirements for Continued Enrollment.

Retention Standards. A retention grade point average of 1.7 or greater during the first 30 attempted semester hours and a retention grade point average of 2.0 or greater after 30 attempted semester hours.

Good Academic Standing. A student who meets the University's retention standards is in good academic standing.

Academic Notice. Freshmen students, 30 or fewer semester hours, with a retention GPA of 1.7 to less than 2.0 will be placed on academic notice and may be required to participate in special academic support activities as a condition of continued enrollment. Academic notice is not recorded on the transcript.

Academic Probation. A student who fails to meet the retention standards will be placed on academic probation and will remain on probation until the applicable retention standard is met or he/she is placed on academic suspension. Students on academic probation may be required to participate in special academic support activities as a condition of continued enrollment. Academic probation is recorded on the transcript.

Academic Suspension. Academic suspension will occur at the end of any semester during which a student who is on academic probation fails to meet the applicable retention standard or fails to earn a semester GPA of at least 2.0 in regularly graded work, not to include activity or performance courses. Suspended students may not be reinstated until one regular semester (fall or spring) has elapsed. Academic suspension is recorded on the transcript.

Suspension of Seniors. A student with 90 or more semester hours in a specified degree program who has failed to meet the retention standard for continued enrollment and has failed to earn a semester GPA of 2.0 , which would allow continued enrollment, may enroll in an additional 15 semester hours in a further attempt to achieve the requirements for retention. A student will be afforded this extension one time only.

Academic Suspension Appeals and Readmission. A student who has been academically suspended from the University for the first time may apply for readmission after one regular semester (fall or spring) or appeal the suspension and apply for immediate reinstatement. There are two categories of students who may appeal a suspension and apply for immediate reinstatement with the understanding the reinstatement does not remove the record of suspension.
(1) Appeals of academic suspension due to "extraordinary personal circumstances" will be considered by the Academic Appeals Committee. Students reinstated on this basis will be readmitted on probation and must maintain a 2.0 GPA each semester or summer session while on probation or raise their retention GPA to the retention standard.
(2) Students suspended at the end of a spring semester may appeal to enroll in the summer session. Students in this category are automatically reinstated upon review and approval of a student's summer enrollment schedule by a designated member or members of the Academic Appeals Committee. Approved summer schedules will be limited to core academic courses that meet general education or degree requirements. To continue in the fall semester these students must make at least a 2.0 GPA in the summer session. Students who do not raise their cumulative GPA to retention standards in the summer session will be enrolled on probation in the fall semester. Students who fail to achieve a 2.0 or higher GPA in the summer session will remain suspended and may not be reinstated until after one regular semester.

Should a reinstated student be suspended a second time, s/he cannot return to the University until such time as s/he has demonstrated, by attending another institution, the ability to succeed academically by raising her/his GPA to retention standards.

Copies of appeals procedures and the conditions and procedures for readmission may be obtained from the Office of Admission.
32. Transcripts. A student may obtain a copy of his/her transcript from the Office of the Registrar at no charge.
33. Minimum Class Size. The minimum enrollment required to offer a course is as follows: 20 enrollees for a lower division course and 10 enrollees for an upper division course.
34. Substitution and Waiver of Courses. Petitions to substitute or waive courses that are designated as necessary to fulfill general education requirements must be approved by the Vice President for Academic Affairs. The dean of the school offering the major or minor is ultimately responsible for approving course substitutions and waivers for major or minor program requirements. This responsibility may be assigned to department chairs or faculty members under the supervision of the dean. Approved substitutions or waivers of major or minor requirements must be documented (by signature and date) on the degree requirements check sheet which is forwarded to the Registrar's office during the degree check and graduation application process. Permission for any other exception to stated requirements must be initiated through the dean responsible for the student's major program and approved by the Vice President for Academic Affairs.
35. Advanced Standing Credit. Extrainstitutional learning is defined as learning that is attained outside the sponsorship of accredited postsecondary institutions. Cameron awards advanced standing credit for Extrainstitutional learning under policies and procedures designed to assure that reliable and valid measures of learning outcomes are or have been applied. A maximum of 64 semester hours of credit earned by advanced standing may be applied toward the requirements for a baccalaureate degree, and a maximum of 45 semester hours of credit earned by advanced standing may be applied toward the requirements for an associate degree. Advanced Standing Credit may only be awarded in those academic disciplines taught at Cameron University, and must be validated by successful completion of 12 or more semester hours of academic work at Cameron before being placed on the student's transcript. Active duty military personnel are exempt from the 12 hour validation requirements, and may have advanced credits placed on the transcript upon completion of one enrollment. The neutral grade of satisfactory (S) will be utilized to award Advanced Standing Credit. Credit recorded at an institution in the Oklahoma State System of Higher Education, is transferable on the same basis as if the credit had been earned through regular study at the awarding institution. Information about the policy, procedures, costs and various methods for receiving Advanced Standing Credit may be obtained from the University Testing Center.
36. Honors Courses. Academically talented students and those with superior preparation and strong motivation can find challenging and rewarding honors experiences in honors courses at Cameron University. Such courses are taught in a number of departments. The Honors Program also circulates full listings of honors offerings prior to the enrollment period for each semester. Honors courses are discussion oriented and are augmented by features such as field trips, guest lectures, and technological enhancements. The aim is to carry well-prepared, motivated students deeper into the subject matter of the course. All honors courses are designated as such on the transcript.
37. Academic Advisors. Cameron students pursuing an associate or baccalaureate degree will be assigned an academic advisor for assistance in course selection, exploration of college majors and careers, and planning of programs of study to achieve educational goals.
38. Academic Forgiveness Policy. The policy provides a means for classifying courses as either "reprieved", "renewed", or "forgiven" and for excluding them from retention/graduation grade point average calculation. A copy of the policy may be obtained from the Registrar's Office.
Forgiven Course. A course in which a student made a "D" or "F" and subsequently repeated, which has been approved for exclusion from retention/graduation grade point average calculation under the provisions of the Forgiveness Policy.
Reprieved Course. A course taken during a semester for which academic reprieve has been granted under the provisions of the Forgiveness Policy.
Renewed Course. A course taken during a semester for which academic renewal has been granted under provisions of the Forgiveness Policy.
39. Remedial/Developmental Course. A course to prepare students for college level work. The course cannot be used to meet degree requirements.
40. Academic Transcript. A full and accurate accounting of the facts of a student's academic life. All courses, including those classified as remedial/developmental, reprieved, and forgiven, are recorded on the academic transcript.
41. Appeal of Final Grade. The only basis for a formal appeal of a final grade is whether the student's final grade was assigned fairly within the grading system adopted by the faculty member. The Grade Appeal Policy is published in the Student Policies Handbook and the Faculty Handbook. A formal request for appeal of a final grade must be filed prior to the end of the first regular semester following the semester during which the course was taken.
42. The Dean's and President's List. The Dean's List, published each semester, includes all full-time Cameron University students whose semester grade point average is 3.0 or better; while only those fulltime students earning a 4.0 grade point average are on the President's List.

## STUDENT PROGRAMS AND SERVICES

A variety of University programs and services provides assistance to students. These programs and services are described in the following sections.

## Admissions Recruiters

Admissions Recruiters maintain contact with area schools and residents to inform them of the educational opportunities that exist at Cameron University. The office is responsible for the University's recruiting program. Campus tours may be arranged through this office. This office provides scholarship applications and related information. The deadline for applications is February 1.

## Orientation

All students entering Cameron with less than 15 earned semester credit hours and who are seeking a degree at Cameron University are required to attend an orientation session. The orientation introduces the student to the campus and provides information about resources, services, and activities. Contact the Office of Admissions (581-2230) to register for an orientation or to request additional information.

## Office of Financial Assistance

The office of Student Financial Assistance provides financial counseling, administers scholarships, grants, loans and student employment. Interested students should reference the Financial Information section of this catalog. As well, students can contact the Financial Assistance Office (581-2293) for further information on application procedures or access Cameron's website at http://www.cameron.edu/financial aid/.

## On-Campus Housing

Cameron University provides two great options for on-campus living - Cameron Village and Shepler Center. Cameron Village combines all the amenities of an apartment complex, the convenience of oncampus living, and the opportunity for involvement within a living-learning community of like-minded students. Shepler Center, comprised of two ten-story high-rises, provides Cameron students with a more traditional living-learning environment.

## Multicultural Services

The Student Development Office works to establish and implement campus programs which heighten awareness and support the diversity of students on the Cameron campus. The office also works closely with cultural student organizations that encourage students to celebrate their culture or heritage. For additional information, please call 581-2209.

## Disabled Student Services

Cameron University recognizes that all students deserve an equal opportunity to participate in university life and attain a higher education. The Student Development Office coordinates accommodations for students with disabilities and develops programs to support disability awareness. If an accommodation on the basis of a disability is required, please contact the office at least four weeks before classes begin or as soon as possible to complete the required documentation for accommodations. Please contact the office immediately if you have any concerns or problems with an accommodation. For more information please call 581-2209.

## Testing Center

The Testing Center is responsible for coordinating, administering, and scoring a wide range of national, international, and local tests for the CU community and the general public. Tests offered include: National and Residual ACT (American College Test), CLEP (College-Level Examination Program), DANTES (Defense Activity for Non-Traditional Education Support), EPE (Graduate English Proficiency Exam), GRE (Graduate Record Exam), General and Subject Tests, LSAT (Law School Admissions Test), MAT (Miller Analogies Test), PRAXIS (Professional Assessment for Beginning Teachers), SAT (Scholastic Aptitude Test), and the Institutional and National TOEFL (Test of English as a Foreign Language).

Additionally, the Testing Center administers computerized placement tests (CPT) for English, reading, and math for admission to Cameron, provides opportunities for gaining credit for certain college courses at Cameron and other universities, and furnishes proctors for both computer-based and paper-based tests for Cameron and other universities. The Testing Center is equipped to handle all testing needs by providing careful and precise test administrations, adhering to high test security standards, and providing a lowdistraction, quiet, clean, and comfortable testing environment. For more information, contact the Testing Center in room 316, South Shepler, 581-2502/2212, or testingcenter@, cameron.edu.

## Career Services

The Student Development Office assists students in achieving their career goals. Career planning is provided to students in a variety of formats to include online job posting and resume database, College Central Network; an online self-assessment program, DISCOVER; and assistance in developing a resume, cover letter and interviewing skills.

## Trio Programs

Cameron University hosts four TRIO programs that are funded under the Higher Education Act. Known as TRIO Programs, they provide a comprehensive array of information, counseling, academic instruction and support services to at risk students in junior high, high school, and college.

## Student Support Services

A part of the Cameron campus since 1987, Student Support Services offers academic advisement, enrollment, peer mentoring, tutoring, financial aid information, special classes and a variety of enrichment workshops and cultural activities to Cameron participants. Participation in Student Support Services provides personal and academic enrichment for students who may face economic, social, and cultural barriers to higher education.

Applicants to the program must meet at least one of the following criteria:

- Be a first generation member of their family to pursue and receive a four-year degree.
- Meet federal guidelines for having an economic need.
- Have a documented learning or physical disability. 581-2352.


## McNair Scholars Program

The Cameron University Ronald E. McNair Post-baccalaureate Achievement Program was established in 1999 and serves to prepare undergraduate students for transition into graduate school. While pursuing a degree of choice, each scholar will be paired with a faculty mentor to improve research skills, prepare for graduate admissions exams, and learn about selecting graduate programs. Scholars will have the opportunity to attend cultural events, participate in research activities, and attend professional conferences. Participants are expected to earn a Ph.D. degree.

Applicants to the program must demonstrate high academic achievement and meet the following criteria:

- Be a first generation college student AND meet federal income requirements, or
- Be an individual from a group traditionally under-represented in graduate education.

For more information, contact the McNair Scholars Program in room 431, North Shepler, 581-2352.

## Open Doors

Open Doors (known nationally as Talent Search) is an outreach program of information, educational guidance counseling, and support for 775 Lawton Public School low-income secondary students, high school dropouts, and high school graduates. Offices opened for this community outreach project in 1991.

More information is available in room 408 North Shepler, 581-5581.

## Upward Bound

Upward Bound was established on campus in 1992 to provide rigorous academic instruction, individual tutoring and personal, career, and academic counseling for 50 low-income, disadvantaged Lawton Public School, college-bound, high school students. The program was expanded in 2000 to include 10 students from Geronimo High School.

For more information, contact Upward Bound in room 408 North Shepler, 581-5581.

## Academic Support Services

The Reading Center. Located in the north wing of Nance-Boyer Hall, the Reading Center provides assistance to students in improving skills of comprehension, vocabulary, study skills and reading rate. A service of the Department of Education, the Reading Center is staffed by specialists who are experienced in assessing and improving reading and study skills. A student visiting the Reading Center is tested to determine the materials best suited to the identified problems and is given a program of individualized instruction designed to strengthen reading and/or study skills.

The Language Learning Center. The Language Learning Center is located on the second floor of Nance Boyer Hall in Room 2005. The laboratory has eight computerized listening/respond/record stations, two video stations, and three additional computer workstations, and is staffed by a full-time lab director. Although the laboratory is primarily for the use of students enrolled in foreign language classes, other students may also use the tape, CD , and video programs available in more than thirty-six foreign languages.

Fine Arts Computer Laboratory. The Fine Arts Laboratory is located in Room 139 of the Music Building. The lab consists of the music library and a computer laboratory. Cameron University Library's collection of recordings and musical scores is housed here, and the lab contains stations available for listening. The remainder of this facility is devoted to computer work stations and various peripherals.

Resources of the Fine Arts Lab are available to all students, faculty, and staff on a first-come, first-served, basis. All users must show a current CU-ID to use any component of this lab. Hours of operation for the Fine Arts Lab may vary from semester to semester and are posted outside the lab door.

Center for Writers. The Center for Writers is located on the second floor of Nance Boyer Hall, northwest wing. The center is open to all Cameron students, offering assistance for writing assignments of any kind, including course papers and applications for scholarships, awards, and graduate and professional. schools. The Center for Writers provides individual tutorial help, assistance with word processing, and access to software and printed material addressing critical-thinking skills, usage, grammar, vocabulary, documentation of research, development of personal style, and all stages of the writing process from prewriting through final draft. Computers are available for students to access the Internet and e-mail accounts and to do word processing. Additionally, educational CD ROMs are available.

The Mathematics Tutorial Laboratory is located in Burch Hall. The Mathematics Tutorial Laboratory is available to students who are enrolled in lower level mathematics classes through MATH 2713 (Elementary Calculus). The lab is staffed by undergraduate students under the supervision of the Math Lab Director. While students may obtain assistance on a walk-in basis, it is recommended that they call for an appointment (581-2484). The informal atmosphere of the lab allows the students to work on homework
assignments alone or with classmates and have immediate assistance available from the math tutors on duty. There is a library of math textbooks which may be checked out by students. Students are also encouraged to make use of four VCR units. A large selection of taped lectures and reviews covering topics in algebra and calculus is available for student use. Some of the tapes available accompany the current textbooks. Tapes may be viewed in the lab or checked out for short periods of time for use at home. Participation by students is strictly voluntary and may be on an irregular, drop-in basis or appointments can be made for a specific time.

The Business Tutorial Laboratory. The Business Laboratory is located on the seventh floor of North Shepler Center, Room 735. The laboratory is staffed by a graduate assistants with specialized expertise in various areas of business, including accounting, economics, finance, statistics, and marketing. The lab is open to all students with questions in business disciplines. The lab is equipped with personal computers, specialized software, calculators, and programmed learning materials. The emphasis is on individual assistance, but special review sessions and other group activities may be scheduled. Participation is voluntary and the laboratory is available 40 or more hours per week at times to accommodate both day and evening students.

The Academic Information Technology (IT) Center. The IT Center, located in Room 104 of Burch Hall, is an open lab intended to serve the computing needs of students and faculty. The resources are available on a first-come, first-served basis at the convenience of the users. All users must be able to justify their utilization of the lab. The Center also proctors for on-line testing. The Center is generally open 90 hours per week during the fall and spring semesters, and 79 hours during the summer semester.

## Library

## http://www.cameron.edu/library

| Administration: | 581-2403 | Reference: | $581-2957$ |
| :--- | :--- | :--- | ---: |
| Circulation: | $581-2955 / 2956$ | Interlibrary Loan: | $581-2382$ |

Cameron University Library promotes scholarly inquiry and work by providing materials and services associated with the access and use of information. The library houses over 250,000 volumes of information, comfortable work areas, a fully-equipped computer lab, and a group of friendly staff members trained to assist Cameron University students and faculty and staff members with their library needs. Online services facilitate access to the physical collection and to a wealth of electronic information.

## Research

Research and scholarship at Cameron University are undertaken by faculty and students using a broad range of approaches. The quest for new knowledge, synthesis of existing information, and application of knowledge are shared experiences within the University community. In keeping with the institutional purpose of providing education through community service, research at Cameron is typically applied in nature. Students are afforded the opportunity to work on real world problems of relevance to the broader community of which the University is a constituent, under the mentorship of caring and highly qualified faculty. Research helps support the teaching mission at Cameron University.

As a part of the research support system, Cameron has established the Cameron Research Fund to promote scholarship. The Research Fund provides grants to students, faculty, and staff for research and innovative instruction. Cameron also maintains the Academic Research Support Center which is available to students and faculty interested in pursuing research and scholarship projects. The Academic Research Support Center is equipped with networked personal computers and peripherals. Staff members are available to provide consultation in research methodologies; to assist in the use of statistical, graphics, database, spreadsheet and presentation software and hardware; to provide oversight of human subject pool usage, institutional review board submissions, and service learning opportunities throughout the community; and to help identify extramural funding opportunities and to aid in the formatting and submitting of grant proposals. Space to conduct research projects and Graduate Research Assistants are also provided.

## Honor Societies

Cameron University currently has 20 nationally and internationally recognized honor and professional societies which elect members based on scholastic achievement. The two University-wide honor societies are:

Phi Kappa Phi, recognizing outstanding juniors, seniors, and graduate students from all disciplines, and
Phi Eta Sigma, a national college scholastic honor society for freshmen.
For information on Cameron honor societies acknowledging outstanding achievement in specific disciplines, please contact the Honors Program, 581-2328.

## Student Activities

Cameron University recognizes the importance of extracurricular activities and the role they play in the college experience. The Office of Student Activities strives to provide a variety of activities.

Cameron recognizes over 70 student organizations with varying interests. The focus of the groups range from academic to social and from religious to political. If a student is interested in joining a group or in starting a new group, contact the Student Activities Office for assistance.

## Student Activity Facilities

The Student Activities Building, located on University Drive, is the seat of all campus activities and houses the offices of the Programming Activities Council and the Student Government Association. The Director of Student Activities, Office of Student Activities, and the Student Activities Lounge are also located in the building. The Student Activities Lounge provides students with a relaxed atmosphere in which they can study, watch TV, or play video games. Computers are available for e-mail and Internet access. If special assistance is required while in the Student Activities Building, call 581-2217.

The McMahon Center, which opened in 2005, includes a great room with a pool table, television, piano and fireplace, as well as a library, classroom and 24 hour resident computer lab. The McMahon Center also houses the Office of Residence Life and a faculty-in-residence.

Cameron Stadium is a bowl type modern football field, with artificial turf and with a seating capacity of approximately 10,000 . The stadium is complete with concession facilities, press box, dressing rooms and ample parking.

McCord Field is a baseball park complete with concession facilities, press box and ample parking. It has a seating capacity of approximately 1,000 .

The Cameron gymnasium has a seating capacity of approximately 1,600 . The building is complete with dressing facilities and four all-purpose classrooms.

The tennis courts are among the finest tennis facilities in the area, with eight pro surface courts and tennis dressing areas.

The Cameron Fitness Center is a 40,000 sq. ft. facility which has a gym for basketball, volleyball and other team activities, four racquetball courts, strength and cardio equipment, aerobic activities, running track, and a 25 yard indoor swimming pool. All areas are handicap accessible.

Accommodations on the basis of disability at any campus facility are available by contacting the Office of Student Development at 580-581-2209, North Shepler Room 314, or by e-mail at student development $@$ cameron.edu.

## Programming Activities Council

The mission of the Programming Activities Council (PAC) is to improve the quality of activities and gain student input into the planning of programs, entertainment and activities. PAC provides activities such as comedians, hypnotists, concerts, and trips for the University. Major events for the entire campus are coordinated and implemented by the Council. For a complete list of activities sponsored by PAC, go to www.cameron.edu/PAC. If special assistance is required for PAC events, call 581-2217, 72 hours prior to the event.

## Student Government

The Student Government is the governing body representing all Cameron University students. This organization, comprised of Senators from the academic departments and representatives from the student organizations, is presided over by a student-elected president. The purpose of the Student Government is to promote the interests and welfare of the student body.

## Student and Departmental Organizations

By participating in departmental clubs, honor societies, and special interest organizations, students develop life skills by utilizing them at the University, and in the community, enriching their college experience. Information about membership in student organizations is available in the Office of Student Activities located in the Student Activities Building, 581-2217.

## Cultural Programs

A wide range of cultural events are presented each year by the various departments and special committees on campus.

The Lecture and Concerts Committee sponsors both popular and classical musical concerts while also bringing to campus a number of eminent speakers on many subjects, from politics to science.

The School of Liberal Arts offers a variety of arts activities and opportunities, which are open to all Cameron students regardless of major. The Art Department sponsors frequent student gallery shows as well as workshops and exhibits by well-known visiting professionals. Cameron's award-winning Speech and Debate Team competes at the national level. Student musicians can choose from a wide array of instrumental ensembles and choirs. The Department of Music and Theatre Arts also produces annual operas and musicals. Plays are offered yearly in Cameron's two theatres.

The Office of Student Activities brings prominent artists, programs, and seminars to the campus to provide a wide range of social and cultural events to Cameron University students, faculty, and staff.

## Intercollegiate Athletics

The Athletics Department is supervised by the Director of Athletics. The Intercollegiate Athletic Committee, a secondary committee of the Institutional Services Committee, serves in an advisory capacity to the Athletic Director.

Cameron University competes at the National Collegiate Athletic Association (NCAA), Division II level. Its teams are consistently ranked among the best and compete successfully against top teams in the nation.

The present program includes the men's sports of basketball, baseball, cross country, golf and tennis, and the women's sports of basketball, golf, softball, tennis and volleyball. Cheerleading and Sports Medicine are also included within the Athletic Department. Scholarships are available in each of these sports/areas. Information can be obtained by writing to the Athletic Director, who will forward inquires to the appropriate head coach.

## Intramurals

Cameron University, through the Athletics Department, offers an extensive intramural program. Activities include basketball, softball, golf, soccer, flag football, racquetball, badminton, tennis, dodgeball, bowling, and volleyball. During the year, other sports may be offered depending upon student demand and availability of facilities and supervisory help.

## Religious Organizations

Cameron University is a state-supported, non-sectarian institution, but it recognizes the importance of spiritual life and cooperates with many off-campus groups that fulfill the religious needs of the community.

Several recognized student organizations are affiliated with denominational student centers. Each of these centers conducts student programs under the direction of professionally trained staff.

## Who's Who Among Students in American Universities and Colleges

Special University recognition is given each year to junior and senior students who are chosen for this prestigious honor. Totaling approximately one percent of the student body, these recipients are selected on the criteria of outstanding scholarship, leadership, citizenship and potential by a committee representing students, faculty, and staff.

## Student Publications

## The University Newspaper

Founded in 1926, The Collegian is the official student newspaper of Cameron University. The Collegian is written, designed, edited, and produced by student editors for the students, faculty, staff, and administration of the university. The Collegian serves both as a voice for the students of the university, and as a training ground for student journalists to hone the skills they develop in their courses. Located in Nance Boyer 2060, The Collegian offices house all of the equipment and materials utilized during the production of the paper. Once the final product is ready to print, pages are sent digitally to an off-campus press. Students deliver papers across the campus and local communities on Mondays. The Collegian is a member of the Oklahoma Collegiate Press Association, Columbia Scholastic Press Association, the Society of Professional Journalists and the Oklahoma Interscholastic Press Association.

## The Oklahoma Review

The Oklahoma Review is an international online literary magazine edited by Cameron University students under the guidance of faculty from the English program. The magazine publishes fiction, poetry, creative nonfiction, interviews, and book reviews by writers from all over the world who are working in English.

## KCCU Radio

KCCU FM is the National Public Radio voice of Cameron University. The station serves several communities from our studios on the Cameron campus. The following communities are served on these frequencies: KCCU Lawton broadcast on 89.3 FM and 102.9 FM, KLCU Ardmore broadcast on 90.3 FM, KCCU Chickasha on $100.1 \mathrm{FM}, \mathrm{KOCU}$ Altus broadcast on 90.1 FM , KMCU in Wichita Falls, Texas broadcast on 88.7 FM and KYCU in Western Oklahoma broadcast on 89.1 FM . These stations provide public radio service to a large section of southwest, south central Oklahoma and north Texas. The station programs NPR news, local news, classical music, jazz and other special programming. KCCU is operated by a professional staff with the assistance of students enrolled in communication courses and other majors across campus. Students may work at the station by enrolling in various communication courses or by volunteering. Some paid positions are available. KCCU has expanded the community service efforts of Cameron University. KCCU is supported by individual members, local businesses and area foundations.

## CUTV

CUTV is a closed circuit television channel broadcasting to monitors located across campus on Channel 11. CUTV channel features a bulletin board of daily activities and events of interest to students, faculty and staff members. The Communication Department produces a weekly news program featuring campus events. Communication students also produce a weekly student government report, a news brief and a feature program focusing on major campus events and campus leaders.

## Student Handbook

The Student Handbook is an official publication of the University which explains University policies and procedures and provides University information for all aspects of University life. Students are responsible for knowing its contents. Copies are available in the Office of the Dean of Student Services.

## Student Conduct

Rules and regulations for the conduct of students attending Cameron University are listed in the Student Handbook. A primary purpose of these regulations is to help maintain both a safe and learning environment for members of the academic community. Student violations of these rules and regulations are reviewed by administrative officers having disciplinary responsibilities. The decisions made by these officers are subject to an appeal, either administratively or by proper referral to an appropriate judicial board. When a student is suspended or dismissed for disciplinary reasons, the grades recorded for the student for that semester shall be determined in the same way as if the student had withdrawn voluntarily and any refund of fees shall be determined by the regular refund policy.

## Access to Student Records

Student records are filed in a variety of offices as listed in the Student Handbook. The administrative officers are responsible for the records under their control and for the appropriate release of information contained in these records. Cameron University forwards educational records on request to other educational institutions in which a student seeks or intends to enroll without providing any further notice to the individual regarding the transfer of records.

Release of Student Information. Student records are confidential in the sense that the information contained in these records is given voluntarily by the student for the private use of the institution for educational purposes only. The information contained in student records is of two different types:

Directory Information. This information may be freely released by University officials without the consent of the student. Upon written request by the student, this information will be treated as confidential and released only with the student's written consent. Forms for withholding student "directory information" are available in the Office of the Registrar. This information consists of:

| Name | Degrees and awards received |
| :--- | :--- |
| Address | Dates of attendance |
| E-mail address | Date of graduation |
| Telephone number | Date of birth |
| Enrollment status | Place of birth |
| Athletic program information |  |

Previous institution most recently attended and other similar information as permitted in the Family Education Rights and Privacy Act (FERPA) (Pub. L. 93-568, Sec. 99.3).

Personally Identifiable Information. All other information contained in student records and not listed as directory information falls into the second, or restricted category. This type of restricted information is found mainly in
(1) the academic record maintained by the Office of the Registrar and controlled by the Registrar;
(2) the student conduct record kept in the Office of Student Development; and
(3) the records of the various other University offices of Financial Assistance, Student Development, Public Safety and Residence Life, supervised by their respective directors.
To protect the rights of the student or graduate, it shall be the policy of the University to release this restricted information to other persons or agencies, only as provided by FERPA. However, a student may choose to release information to a third party by completing a FERPA waiver. Forms and information are available in the Office of the Dean of Student Services, North Shepler 324, 581-2244.

Emergency situations may develop which could necessitate the release of restricted information without the approval of the student or proper legal action. In these emergency situations, where the immediate welfare of the student or the University may be in jeopardy, the administrative official in charge of the office maintaining the requested information will make the decision regarding the release of the information. In cases where the responsible administrator is not available to make the decision, or, if he or she decides not to release the information, an appeal to secure the information may be made to the University President.

## Student Union

The facilities of the Clarence L. Davis Memorial Student Union are open to Cameron University students, faculty, staff and guests. During the week there is an attended game room featuring pool, ping pong and various arcade games. All of these facilities are available for student and organization use with prior approval.

## Campus Dining

Food service is provided at two locations, the Davis Student Union and the Shepler residence halls. The Davis Student Union offers such items as Pizza Hut, deli subs and sandwiches, hot grill items and "grab and go" pre-packaged salads, cakes and drinks. Items may be purchased using either cash or your "CamCard." Shepler provides two food service venues, the Shepler Cafeteria and the Campus Brew. The Shepler Cafeteria, located between the two Shepler towers, provides meals for resident students. This cafeteria operates on an "all you can eat" basis for the residents of Shepler. There are various meal plans to select from that will suit the need of any student. Also located in Shepler is the Campus Brew, offering Starbucks coffee, smoothies, snacks, and sandwiches.

## Bookstore/Post Office

The Cameron University Bookstore is conveniently located in the Clarence L. Davis Memorial Student Union. Here students will find their required course materials as well as a selection of recommended study aids.

In addition to textbooks, the Bookstore carries a wide selection of imprinted clothing and gift ware which students can purchase to show their school spirit. The Cameron Bookstore also carries basic school supplies, educationally priced software, study aides such as Cliff Notes and Schaum's Outlines, electronic equipment and top 40 CD's.

The Bookstore also stocks a selection of trade books with emphasis on nursing, computers, ethnically diverse interests and local/faculty authors. Students will find a selection of candy/snacks and cold drinks for purchase at the Bookstore as well.

Graduation regalia, class rings, diploma frames and announcements are also available through the Cameron Bookstore.

Don't see what you are looking for, just ask a store associate and the Bookstore can place a special order for you at no additional charge.

Students can shop the Cameron Bookstore on-line as well, in one of three ways: www.cameron.bkstr.com, through a link on the university website or go to efollett.com, choose the state and then click on Cameron.

The Cameron University Post Office is located in the Davis Memorial Student Union inside the Bookstore. Patrons can purchase postage here as well as money orders and post outgoing mail and packages.

## Cashiers and "One Stop"

Cashiers for Cameron University are located on the first floor of the Administration Building and at "One-Stop" located on the first floor of North Shepler.

The cashiers in the Administration Building are responsible for releasing to students all financial assistance checks, such as loans, grants, scholarships and work study, as well as accepting payments for charges incurred at the University.
"One-Stop" provides a convenient, second location for students, faculty and staff to make payments for charges incurred at the University. Parking permits and Cameron University ID cards are available at "One Stop."

Both areas accept credit card payments using MasterCard, Visa and Discover.

## Health Care And Insurance

Cameron provides no on-campus medical services, but has chosen to make arrangements with several entities to secure access for Cameron students to top quality outpatient clinical services at discounted prices. Cameron students may use Memorial's AM-PM Clinic at 4411 West Gore Boulevard for minor illnesses and injuries and other non-emergency outpatient clinical services during regular business hours. Cameron students will be provided access to Memorial's 24-hour, professionally-staffed, fully-equipped emergency room at Memorial's primary location adjacent to the Cameron campus at 3401 West Gore Boulevard for bona fide emergencies and injuries or illnesses which occur outside regular business hours.

In addition, the university has also partnered with the Southwest Oklahoma Family Medicine Clinic to provide primary healthcare services to Cameron students. The clinic is located at 1202 NW Arlington. Walk-ins are welcome or students can make an appointment by calling (580) $248-2288$, extension 10 or 11.

The University recommends that all students acquire some form of health insurance to meet unexpected medical needs. The University has gathered information from various health insurance companies that provide student health insurance to allow students to review an array of plans to suit their needs. More information on access to medical services is available in the Student Handbook or from the Office of Student Development, 581-2209.
R.O.T.C. Medical Eligibility -- Satisfactory completion of a physical examination is required prior to participation in the advanced Military Science Program.

## Cameron University Alumni Association

The purpose of the Association is to cooperate with and assist in the promotion of the goals and purposes of Cameron University, and to encourage a continuing and increasing interest in the University among graduates, former students and friends through information, education and service.

Projects include reunions, alumni and faculty awards. A benefit golf tournament and a membership drive support scholarships and various other campus activities.

Membership is open to anyone interested in supporting the Association.
Further information may be obtained by contacting the Cameron University Alumni Association, Office of Alumni Relations, 2800 West Gore Boulevard, Lawton, Oklahoma 73505; by telephone at 580-581-2988; or on the web at http://www.cameron.edu/alumni.

## GENERAL EDUCATION REQUIREMENTS

## BACCALAUREATE DEGREE (50 Hours)

COMMUNICATION 9 hours
(a) ENGL 1113 (b) ENGL 1213 (c) COMM 1113
NOTE: English courses numbered lower than 1113 do not apply toward degree requirements.
MATHEMATICS
Select one of the following: MATH 1513, MATH 1613, MATH 1715, MATH 1813,
Select one of the following: MATH 1513, MATH 1613, MATH 1715, MATH 1813,3 hours3 hoursMATH 2215, MATH 2713. Some major programs specify the course to be selected.Refer to the major to determine which course is specified.NOTE: Mathematics courses numbered lower than 1513 do not apply toward degreerequirements.
SCIENCE 8-10 hours
(a) BIOL 1004, BIOL 1114 or BIOL 1364
(b) ESCI 1135 or CHEM 1004 or CHEM 1364/1361 or CHEM 1474/1471 or PHYS 1004or PHYS 1115 or GEOL 1014 or PSCI 1055 or ASTR 1104.
One course must be a laboratory science.
AMERICAN HISTORY AND POLITICAL SCIENCE 6 hours
(a) HIST 1483 or HIST 1493 (b) PS 1113
HUMANITIES ..... 6 hoursTo be selected from the following with no more than one course from the discipline inwhich the student is majoring.
(a) Interdisciplinary Humanities Courses: HUM 2513
(b) ART 1013, ART 2613, ART 2623
(c) THTR 1103, FNAR 1013
(d) ENGL 2013, ENGL 2053, ENGL 2313, ENGL 2323, ENGL 2343
(e) ARBC 1113, ARBC 1223, CHNS 1113, CHNS 1223, FREN 1113, FREN 1223 ,FREN 2113, FREN 2223, GERM 1113, GERM 1223, GERM 2113, GERM 2123,ITAL 1113, ITAL 1223, LATN 1113, LATN 1223, LATN 2113, LATN 2223,PRSN 1113, PRSN 1223, RUSN 1113 , RUSN 1223, SPAN 1113, SPAN 1223,SPAN 2113, SPAN 2223, SWLI 1113, SWLI 1223
(f) HIST 1113, HIST 1123, HIST 2113, HIST 2223, HIST 3143, HIST 3353
(g) MUSC 1013, MUSC 1023, MUSC 1033, MUSC 1413
(h) PHIL 1113, PHIL 2213
BEHAVIORAL SCIENCE ..... 3 hours
Select one from the following: FAMS 1123, PSY 1113 , SOCI 1113
ECONOMICS3 hours
Select one from the following: AGRC 1334, ECON 2013, GEOG 3023, CRM 3603
PHYSICAL EDUCATION ACTIVITY* ..... 4 hours(a) Any physical education activity course(s) or HLTH 1012(b) Intramural sports (not to exceed 1 course)
(c) Intercollegiate athletics (not to exceed 1 course)
(d) Any of the following Military Science courses: MSL 1012, MSL 1022, MSL 2012,MSL 2002, MSL 3013, MSL 3023, MSL 4013, MSL 4023(Each of which will satisfy one hour of the Physical Education activity requirement)
*Not required if student:
(a) is 30 years of age or older, or
(b) is recommended by a medical doctor for waiver of the requirement, or
(c) is awarded credit based on one year of active full-time military service
ELECTIVES SUFFICIENT TO TOTAL 50 SEMESTER HOURS
But with no more than 6 hours of these electives in any one department.

## ASSOCIATE DEGREE

Eighteen (18) hours of General Education are required of each person who receives an Associate of Applied Science Degree from Cameron University. The Associate of Science Degree requires students to complete the same General Education program as Baccalaureate Degree students at Cameron University, except for Physical Education Activity and Electives ( 38 to 40 hours).

## COMPUTER LITERACY

All undergraduate degree programs require students to achieve some level of computer literacy. The means by which students acquire or demonstrate such literacy varies among the programs, but acceptable, means include (1) successfully completing a high school computer science course that meets State Regents' high school curricular requirements, or (2) satisfactorily completing a computer literacy assessment; or (3) successfully completing courses designated as program requirements.

# SCHOOL OF BUSINESS 

John Courington - Interim Dean<br>(Vacant) - Associate Dean/Chair<br>Aubree Helvey - Assistant Dean<br>Velton Flowers - Undergraduate Business Counselor<br>Bernadette Lonzanida - Graduate Coordinator<br>The mission of the Cameron University School of Business is to provide quality education designed to produce skilled business leaders, to promote ethical practices, and to foster economic development in a dynamic global environment. The mission is based upon a dedication to continuous improvement, scholarly activity, and service.

## SCHOOL OF <br> Business

Professors: Ahmed, Bhattacharya, Carraher, Courington, Sukar, Yuyuenyongwatana Associate Professors: Brooks, Burgess, Masters, Paridon
Assistant Professors: Cammack, Helvey
Instructors: Treadwell
Business Counselor: Flowers
Graduate Coordinator: Lonzanida
The School of Business offers programs leading to an Associate of Science in Business degree, a Bachelor of Accounting degree, and a Bachelor of Business Administration degree with a specialization in one of the following: Management, Marketing, Finance, Economics, and General Business Administration. Academic advisement and enrollment are provided by the Undergraduate Business Counselor in the school. The School also offers a Master of Business Administration and a Master of Science in Entrepreneurial Studies degree. Refer to Graduate Catalog for details.

## BACHELOR OF ACCOUNTING DEGREE (305)



## III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.

## ACCOUNTING COURSES (ACCT)

## 2013* PRINCIPLES OF FINANCIAL ACCOUNTING, 3 hours credit

Basic principles of financial accounting, including how to record transactions, prepare financial statements, analyze selected accounts and use accounting information in decision-making. Lecture 3 hours. Prerequisite: Sophomore standing or by consent of advisor.

## 2023* PRINCIPLES OF COST/MANAGERIAL ACCOUNTING, 3 hours credit

Basic principles of cost accounting related to manufacturing and other enterprises. Use of management and cost accounting information in decision-making. Lecture 3 hours, Prerequisite: ACCT 2013.

## 3013 INTERMEDIATE ACCOUNTING I, 3 hours credit

A review of the fundamental processes of accounting with an emphasis on the basic accounting process,
procedures and working papers, statements, cash receivables, liabilities, and inventory pricing and planning. Lecture 3 hours. Prerequisite: ACCT 2023.

## 3023 INTERMEDIATE ACCOUNTING II, 3 hours credit

Continuation of Intermediate 3013, with emphasis on corporation capital stock, retained earnings, dividends, income taxes, and analysis and interpretation of accounting data. Lecture 3 hours. Prerequisite: ACCT 3013.

## 3133 COST ACCOUNTING, 3 hours credit

Cost accounting systems that assist management in planning, decision-making and control. Cost-volumeprofit analysis, cost behavior, standard job order and process costing, and inventory control using Just-inTime analysis. Lecture 3 hours. Prerequisite: ACCT 2023.

## 3213 MANAGERIAL ACCOUNTING, 3 hours credit

The analysis and interpretation of accounting information for managerial decision making, forecasting, and control. Designed for non-accounting majors. No credit for accounting majors. Lecture 3 hours. Prerequisite: ACCT 2023.

## 3313 GOVERNMENTAL ACCOUNTING, 3 hours credit

Accounting for governmental and non-profit entities. Analysis of budget systems, the use of funds, internal and external reporting requirements, and governmental accounting terminology. Lecture 3 hours. Prerequisite: ACCT 2023.

## 3413 PETROLEUM ACCOUNTING, 3 hours credit

Financial accounting principles, policies, practices, and procedures used by oil and gas producers. Lecture 3 hours. Prerequisite: ACCT 2023.

## 4013 INDIVIDUAL INCOME TAX, 3 hours credit

Federal income taxation of individuals; current tax laws and tax return preparation. Lecture 3 hours. Prerequisite: 12 hours of Accounting.

## 4023 CORPORATE INCOME TAX, 3 hours credit

Federal taxation of partnerships and corporations; gift and estate taxes. Lecture 3 hours. Prerequisite: ACCT 4013.

## 4113 ADVANCED ACCOUNTING, 3 hours credit

Accounting for business combinations, multinational operations, partnerships and insolvent organizations; interim and segmental reporting. Lecture 3 hours. Prerequisite: ACCT 3023.

## 4213 AUDITING, 3 hours credit

Generally accepted auditing standards as they apply to different types of businesses. Audit techniques, reporting standards, the code of professional conduct and auditor's responsibility. Lecture 3 hours. Prerequisite: 18 hours of Accounting.

## 4413 C.P.A. PROBLEMS, 3 hours credit

An overview of accounting practice and theory based on current Financial Accounting Standards Board regulations. Lecture 3 hours. Prerequisite: 21 hours of Accounting including ACCT 4113.

## 4471-3 SEMINAR IN ACCOUNTING, $1-3$ hours credit

Seminar presentation and special studies in topics of current interest to the accounting professional. Prerequisite: Permission of Chair.

## 4483 ACCOUNTING INTERNSHIP, 3 hours credit

Supervised work experience in an accounting section of a corporate or other business setting. The internship will allow students to encounter practical workplace problems in accounting and gain experience in working in a professional setting. May be repeated for a maximum of 6 hours, but repeat must be with a different
business. A minimum of 150 hours of on-the-job training is required to complete the course. Prerequisite: Department permission.

## 4491-3 INDEPENDENT STUDY IN ACCOUNTING, $1-3$ hours credit

Independent readings and/or study of specific problems or special subjects in Accounting based upon pre-approved outlines of plans with conferences and/or written reports. Prerequisites: Permission of the Chair and 9 upper division hours in Accounting. A proposal must accompany the request when submitted for approval.

## 4513 ACCOUNTING INFORMATION SYSTEMS, 3 hours credit

Structure, flow and use of accounting data and its relationship with other systems in a firm; systems design, analysis and security issues. Practical experience with a commercial accounting software package. Lecture 3 hours. Prerequisite: ACCT 2023 and MIS 3013.

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## BACHELOR OF BUSINESS ADMINISTRATION (320)

# I. GENERAL EDUCATION REQUIREMENTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50 hours General Education requirements are found on the red striped pages. <br> Students are encouraged to select their elective hours in general education from courses outside the School of Business. <br> All Bachelor of Business Administration majors are required to complete MATH 2713, Elementary Calculus. 

II. MAJOR . .............................................................................. . . . 54 hours

## Core Courses

ACCT 2013, ACCT 2023, ECON 2023, MGMT 3013, MIS 3013, BUS 3113 , BUS 3213, MKTG 3413, FIN 3603, BUS 3613, BUS 4633

Specialization
21 hours
Individuals who major in Business Administration must complete one of the following controlled areas of Specialization.

Management: ACCT 3213, MGMT 3513, MGMT 3613, MGMT 4023 or MGMT 4033, Upper-Division Management Electives ( 6 hours), Upper-Division Business Elective ( 3 hours).

Marketing: MKTG 3423, MKTG 4443, Upper Division Marketing Electives (12 hours), Upper Division Business Electives (3 hours)

Management Information Systems: MIS 2013, MIS 3033, MIS 3083, MIS 3223, MIS 4533. MIS electives ( 6 hours) chosen from MIS 2113, MIS 3021-3, MIS 3123, MIS 4471-3, MIS 4491-3.

Finance: FIN/ECON 3313, FIN 3623, FIN 4333 ( 9 hours); Upper Division Finance Electives ( 12 hours) chosen from FIN 4473-Seminar: Portfolio I, FIN 4473, Seminar: Portfolio II, ACCT 3213, ECON 3013, ECON 3023.

Economics: ECON 3013, ECON 3023, ECON 3313
Upper-Division Business and Economics Electives ( 12 hours)
General Business Administration: ACCTG 3213, MGMT 3513, Upper-Division Electives (15 hours) chosen from any Business Department courses, with no more than 6 hours from any one area.
III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.

## ASSOCIATE OF SCIENCE IN BUSINESS (505)

I. GENERAL EDUCATION REQUIREMENTS ..... 38 hours
COMMUNICATION 9 hours
(a) ENGL 1113 (b) ENGL 1213 (c) COMM 1113
NOTE: English courses numbered lower than 1113 do not apply towarddegree requirements.
MATHEMATICS ..... 3 hoursSelected one of the following: MATH 1513, MATH 1613,MATH 1715, MATH 1813, MATH 2215, MATH 1713. Somemajor programs specify the course to be selected.Refer to the major to determine which course is specified.NOTE: Mathematics courses numbered lower than 1513 do notapply toward degree requirements.
SCIENCE 8-10 hours
(a) BIOL 1005 or BIOL 1364
(b) ESCI 1135 or CHEM 1004 or CHEM 1364/1361 or CHEM1474/1471 or PHYS 1004 or PHYS 1115 or GEOL 1014or PSCI 1055 or ASTR 1104
One course must be a laboratory science.
AMERICAN HISTORY AND POLITICAL SCIENCE ..... 6 hours
(a) HIST 1483 or HIST 1493 (b) PS 1113
HUMANITIES ..... 6 hoursTo be selected from the following with no more than one course fromthe discipline in which the student is majoring.(a) Interdisciplinary Humanities Courses: HUM 2113, HUM 2223,HUM 2513
(b) ART 1013, ART 2613, ART 2623
(c) THTR 1103, FNAR 1013
(d) ENGL 2013, ENGL 2053, ENGL 2313, ENGL 2243
(e) FREN 1113, FREN 1223, FREN 2113, FREN 2223, GERM 1113 , GERM 2113, GERM 2123, ITAL 1113, ITAL 1223, LATN 1113 , LATN 1223, LATN 2113, LATN 2223, SPAN 1113, SPAN 1223, SPAN 2113, SPAN 2223,
(f) HIST 1113, HIST 1123, HIST 2143, HIST 3353
(g) MUSC 1013, MUSC 1023, MUSC 1413
(h) PHIL 1113, PHIL 2213
BEHAVIORAL SCIENCE ..... 3 hours
Select one from the following: FAMS 1123, PSY 1113, SOCI 1113
ECONOMICS3 hoursSelect one from the following: AGRC 1334, ECON 2013, GEOG3023, CRM 3603
II. BUSINESS COURSES 21 hours
Required Courses: ..... 12 hours
BUS 1113, ACCTG 2013, MIS 2113, FIN 2113
Business Electives 9 hours
III. ELECTIVES sufficient to complete ..... 60 hours

## BUSINESS COURSES (BUS)

## 1113* INTRODUCTION TO BUSINESS, 3 hours credit

A general survey of the more significant principles, problems, and practices involved in the administration of business enterprises. No credit for juniors and seniors who are business administration or accounting majors. Lecture 3 hours.

## 2211-3 SPECIAL STUDIES, 1-3 hours credit

A study of special Business areas or problems. Areas of study will vary from semester to semester and from one discipline area of Business to another. The course may be repeated for additional credit with permission of Chair. Prerequisite: As listed for each separate offering and/or permission of Chair.

## 3113* BUSINESS COMMUNICATIONS, 3 hours credit

Principles of effective business communication; organizational communication theory; document design; practice in preparing letters, memoranda, business reports, and employment-related messages; professional oral presentations. Prerequisite: ENGL 1213 or equivalent.

## 3213 BUSINESS LAW I, 3 hours credit

An overview of the legal system, principles of contract law, Uniform Commercial Code and how it has changed contract law, rights of debtors and creditors and bankruptcy. Lecture 3 hours. Prerequisite: Junior standing or permission of Chair.

## 3223 BUSINESS LAW II, 3 hours credit

A continuation of Business Law I. Agency, partnership, and corporate law with an emphasis on selecting the form of business organization. Sections on personal and real property, bailments, and real estate transactions. A brief look at wills, estates, and trusts. Lecture 3 hours. Prerequisite: BUS 3213.

## 3613* BUSINESS STATISTICS, 3 hours credit

An introduction to quantitative tools used in business analysis. Measures of central tendency, dispersion, uncertainty, statistical inference, and sampling are covered, as well as regression and correlation, time series analysis, index numbers, and seasonal-cyclical variations. Lecture 3 hours. Prerequisite: MATH 2713.

## 3881-4 WORKSHOP, 1-4 hours credit

A course designed to emphasize specific Business and/or Economic topics. Combines the use of lectures and practical application exercises. May be repeated for a maximum of 6 credit hours. Prerequisites: Junior standing and permission of Chair; permission of Chair if taken for no credit.

## 4023 BUSINESS OPERATIONS RESEARCH, 3 hours credit

Managerial decision-making processes and techniques. Includes a discussion of the environment of decision-making with emphasis on quantitative techniques such as linear programming, queueing theory, game theory, PERT analysis, Markov analysis, and inventory models. Lecture 3 hours. Prerequisite: BUS 3613.

## 4213 CPA LAW, 3 hours credit

A review of the principles of contracts, sales, agency, partnership, corporations, suretyship, property, and bankruptcy. Study of secured transactions, commercial paper, securities regulations, insurance, employment, and accountant's liability. Lecture 3 hours. Prerequisite: 6 hours of Business Law.

## 4471-3 SEMINAR IN BUSINESS, 1 - 3 hours credit

Group projects designed to meet special needs of students in any of the disciplines of the Business Department. Prerequisite: Permission of Chair.

## 4483 BUSINESS INTERNSHIP, 3 hours credit

Supervised work experience in a professional setting directly relating to the student's business discipline. The internship will allow students to encounter practical workplace problems within their major field and gain experience in corporate and other business settings. May be repeated for a maximum of 6 hours, but
repeat must be with a different business. A minimum of 150 hours of on-the-job training is required to complete the course. Prerequisite: Department permission.

## 4491-3 INDEPENDENT STUDY IN BUSINESS, 1 - 3 hours credit

Independent readings and/or study of specific problems or special subjects, based on preapproved outlines of plans, with conferences and/or written reports. Prerequisites: Nine upper-division hours in the discipline of the independent study and permission of the Chair. A proposal must accompany the request when submitted for approval.

## 4633 BUSINESS POLICY, 3 hours credit

A capstone course designed to integrate course work in various functional areas of business. The focus of the course is understanding business strategy and competitive environment. Emphasis is on critical thinking and analysis, and decision making for business. Group projects, cases, business plan exercises and/or business simulations are used to give students an opportunity to draw upon and integrate functional knowledge and skills. Both written and oral communications are stressed throughout the course. Prerequisites: FIN 3603, MGMT 3013, MKTG 3413, and graduating senior status, or permission of Chair.

## ECONOMICS COURSES (ECON)

## 1013* ECONOMIC HISTORY OF UNITED STATES, 3 hours credit

A survey of the economic development of the United States from early colonial economics through frontier stages to the present day mass industrial complexes. Lecture 3 hours.

## 2013* PRINCIPLES OF ECONOMICS I, 3 hours credit

An introduction to, and analysis of, the general concepts of the American capitalistic system; supply and demand; the determinants of the level of total output, employment, and prices; monetary policy; and American economic growth policies. Lecture 3 hours.

## 2023* PRINCIPLES OF ĖCONOMICS II, 3 hours credit

A continuation of Economics 2013 with analysis of the concepts of allocation of resources to the firm and the distribution of final output to the individual; domestic economic problems of agriculture, unions, monopoly, and social goods; international trade and payments; and foreign economics. Lecture 3 hours. Prerequisite: ECON 2013.

## 3013* MICRO ECONOMIC THEORY, 3 hours credit

An analysis of the over-all functioning of the price system and of the modern business firm in a private enterprise, market-type economy. The relation of price, quantity, and profit under competition and imperfect competition. Lecture 3 hours. Prerequisite: ECON 2023.

## 3023* MACRO ECONOMIC THEORY, 3 hours credit

National income concepts; aggregate demand by household, business, government, and foreign sectors; determination of national income, interest rate, prices, output, and employment levels. Lecture 3 hours. Prerequisite: ECON 2023.

## 3313* MONEY AND BANKING, 3 hours credit

Historical survey of money and the evolution of banking; organization and the operation of banks, monetary theory and markets, and the functions of the Federal Reserve System. Lecture 3 hours. Prerequisite: ECON 2023. (Cross-listed with FIN 3313.)

## 3433 LABOR PROBLEMS, 3 hours credit

Problems of labor in an industrial society, wages, hours, working conditions, conflicts between management and labor, principles of labor law. Lecture 3 hours. Prerequisite: ECON 2023.

## 4413 COMPARATIVE SYSTEMS, 3 hours credit

Comparative analysis of the economic theory and institutions of capitalism, socialism, communism, and fascism. Lecture 3 hours. Prerequisite: ECON 2023.

## 4471-3 SEMINAR IN ECONOMICS, 1 - 3 hours credit

Seminar presentation and special studies in Economics for undergraduate students. Prerequisite: Permission of Chair.

## 4491-3 INDEPENDENT STUDY IN ECONOMICS, 1 - 3 hours credit

Independent study of current topics in Economics for undergraduate students. Prerequisites: Permission of the Chair and 9 upper division hours in Economics. A proposal must accompany the request when submitted for approval.

## FINANCE COURSES (FIN)

## 2113 PERSONAL FINANCE, 3 hours credit

Problems and applications in personal finance. Study includes budgeting, credit use, financial institutions, insurance, real estate, taxes, investment, retirement, and estate planning. Lecture 3 hours.

## 2643 INSURANCE, 3 hours credit

Basic principles of insurance and the management of insurable risks in a business organization and personal use of insurance. An analysis of fire, casualty, liability, life, and health insurance; as well as the various types of insurance organizations. Lecture 3 hours.

## 2813 FUNDAMENTALS OF REAL ESTATE, 3 hours credit

Basic principles with elementary discussion of title and transfer, value, liens, financing, taxes. Professional ethics of the Real Estate Business. Forty-five hours of instruction. Lecture 3 hours. Prerequisite: ECON 2013 or permission.

## 2823 ADVANCED REAL ESTATE PRINCIPLES AND PRACTICES, 3 hours credit

Emphasis on practical and operational problems of the broker; transferring title, contract law, mortgage theory and current mortgage practice, property valuation, investment and taxation, agency, real estate broker practice, license law and transaction closing. Lecture 3 hours. Prerequisite: FIN 2813 or equivalent.

## 3313* MONEY AND BANKING, 3 hours credit

Historical survey of money and the evolution of banking; organization and the operation of banks, monetary theory and markets, and the functions of the Federal Reserve System. Lecture 3 hours. Prerequisite: ECON 2023. (Cross-listed with ECON 3313.)

## 3603* PRINCIPLES OF FINANCE, 3 hours credit

A basic course in financial structure; sources, acquisition and management of short-term and long-term funds in both the money and capital markets; money market; instruments; the comparative evaluation of corporate capital structure in terms of risk, control and flexibility. Lecture 3 hours. Prerequisites: ECON 2023 and ACCT 2023.

## 3623 INVESTMENTS, 3 hours credit

An introduction to the appraisal of securities and the management of investment in the various types of securities and on the concepts of asset and portfolio management. Lecture 3 hours. Prerequisite: FIN 3603 or permission of Chair.

## 4333 FINANCIAL MANAGEMENT, 3 hours credit

A detailed examination of financial management decision making techniques. The case study method is used with the aid of micro-computer software to cover the following topics: Cash and profit planning, asset management, capital structure, capital budgeting, and firm valuation, including mergers and acquisitions. Lecture 3 hours. Prerequisites: FIN 3603 and ACCT 3213.

## 4471-3 SEMINAR IN FINANCE, 1 - 3 hours credit

Seminar presentation and special studies in topics of current interest in Finance. Prerequisite: Permission of Chair.

## 4491-3 INDEPENDENT STUDY IN FINANCE, 1 - 3 hours credit

Independent study of current topics in Finance for undergraduate students. Prerequisites: Permission of Chair and 9 upper-division hours in Finance. A proposal must accompany the request when submitted for approval.

## MANAGEMENT COURSES (MGMT)

## 2213 SUPERVISORY MANAGEMENT, 3 hours credit

Study of the problems of entry level managers arising from legal constraints, manpower requirements, employee behavior, and other business-environment problems. Lecture 3 hours.

## 3013* PRINCIPLES OF MANAGEMENT, 3 hours credit

An introductory management course dealing with the fundamental principles of management: planning, organizing, and controlling. Lecture 3 hours. Prerequisite: Junior standing or permission of Chair.

## 3513 HUMAN RESOURCE MANAGEMENT, 3 hours credit

A comprehensive review of human resources policy development, along with a description and analysis of human resources techniques. The interdependence of human and operating functions is discussed. Focuses on the primary management functions as they relate to employment law, recruitment, selection, training, performance appraisal, compensation, and safety and health. Lecture 3 hours. Prerequisite: MGMT 3013 or permission of Chair.

## 3613 PRODUCTION AND OPERATIONS MANAGEMENT, 3 hours credit

A study of manufacturing and service systems. Emphasizes product and process development; the planning of production facilities, quality control and production control systems; and logistics and distribution. Includes an introduction to quantitative tools useful in managing such activities. Lecture 3 hours: Prerequisites: MGMT 3013 and BUS 3613.

## 3813 LABOR MANAGEMENT RELATIONS, 3 hours credit

Study of the relationships between management and labor: contract negotiations, grievance procedures, and arbitration in the public and private sectors. Lecture 3 hours. Prerequisite: MGMT 3513.

## 4013 ORGANIZATIONAL BEHAVIOR, 3 hours credit

Concerns the application of knowledge relating to human behavior theory as it applies to the business environment. Includes motivation theory, leadership patterns, organization climate, interpersonal relations, intergroup behavior, etc. Emphasis is on behavioral research findings. Lecture 3 hours. Prerequisite: MGMT 3513.

## 4023 STRATEGIC MANAGEMENT, 3 hours credit

Emphasizes the techniques of initiating and implementing strategic planning. Strategic management concepts are examined in diverse business situations. Lecture 3 hours. Prerequisite: 9 hours of upper-division management.

## 4033 CASE STUDY IN SMALL BUSINESS, 3 hours credit

An application-based program to involve students in identifying problems and recommending solutions in actual business situations. Lecture 3 hours. Prerequisite: FIN 3603, senior standing, or permission of Chair.

## 4053 BUSINESS AND SOCIETY, 3 hours credit

An examination of the external environment of business, the need to manage the external environment, and management's responsibility to the various elements of the environment. Lecture 3 hours. Prerequisite: MGMT 3513.

## 4143* MANAGERIAL COMMUNICATION, 3 hours credit

Application of communication theory and techniques to management situations. Development of oral and written communication skills as effective administrative tools. Lecture 3 hours. Prerequisite: BUS 3113.

## 4443 PROJECT MANAGEMENT, 3 hours credit

Using a core-based approach, this course examines the key elements in multimedia instructional project management: accounting, human resource management and multimedia. Develops essential skills such as project evaluation, contract preparation and maintenance, cost estimating and budget tracking, scheduling, human resource acquisition and training, and effective team management. Additional topics include: Procurement of talent and intellectual property rights from other sources and ensuring that firm assets and copyright will be protected. Lecture 3 hours.

## 4471-4 SEMINAR IN MANAGEMENT, 1-4 hours credit

Group study of specified topics in management for undergraduate students. Can be repeated for a maximum of 9 hours credit under different topic titles. Prerequisites: 9 hours of upper-division management and permission of Chair.

## 4491-4 INDEPENDENT STUDY IN MANAGEMENT, 1-4 hours credit

Independent study of specified topics in management for undergraduate students. Prerequisites: Senior standing, 9 upper-division hours in management, and permission of the Chair. A proposal must accompany the request when submitted for approval.

## MARKETING COURSES (MKTG)

## 3413* PRINCIPLES OF MARKETING, 3 hours credit

A basic course utilizing a managerial approach to the study and development of marketing with emphasis on marketing strategy and development of marketing mix. Lecture 3 hours. Prerequisite: Junior standing or permission of Chair.

## 3423 CONSUMER MOTIVATION AND BEHAVIOR, 3 hours credit

An examination of the internal and external influences on buyer behavior; analysis of the buying process; consumer decision-making; aggregate consumer behavior over time. Lecture 3 hours. Prerequisites: MKTG 3413, Junior standing.

## 3433 RETAILING, 3 hours credit

Designed to assist students seeking knowledge of the retail field. Principles and methods of organizing and operating a retail firm with particular emphasis on store layout, buying, pricing, sales promotion, control of stock, and evaluation. Lecture 3 hours. Prerequisites: MKTG 3413 and MGMT 3013.

## 3533 SALES MANAGEMENT, 3 hours credit

Problems of organization; planning and control of sales; formulation of sales policies and the operation of a sales force. Using the principles of selling along with supervising a sales program. Lecture 3 hours. Prerequisites: MGMT 3013 and MKTG 3413.

## 4433 ADVERTISING, 3 hours credit

A survey of the various advertising media; planning and evaluating advertising materials. Lecture 3 hours.
Prerequisite: Senior standing or permission of Chair.

## 4443 MARKETING RESEARCH, 3 hours credit

Development of statistical techniques applicable to marketing research. Includes a discussion of experimental design, planning research and investigations; formulation of hypothesis; logic and reasoning; conducting research investigations including formulation of the problem, sampling techniques, interviews, developing questionnaires; and the application of statistical techniques for reporting data. Lecture 3 hours. Prerequisites: MKTG 3423 and BUS 3613.

## 4481-3 SEMINAR IN MARKETING, 1-3 hours credit

Study of specified topics in marketing. Can be repeated for a maximum of 9 hours credit under different topic titles. Prerequisites: MKTG 3413 and permission of Chair.

## 4491-3 INDEPENDENT STUDY IN MARKETING, 1 - 3 hours credit

Intensive study and directed research on special topics in marketing. Prerequisites: Nine upper division hours in marketing and permission of Chair. A proposal must accompany the request when submitted for approval.

* Liberal arts and sciences course.

GR May be taken for graduate credit.

# SCHOOL OF EDUCATION AND BEHAVIORAL SCIENCES 

Ronna Vanderslice - Dean<br>Claudia Edwards - Graduate Advisor<br>DEPARTMENT OF EDUCATION<br>Michelle Smith, Chair<br>\title{ DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION Joe Jones, Interim Chair }

## DEPARTMENT OF PSYCHOLOGY AND HUMAN ECOLOGY Lawrence Weinstein, Chair

The mission of the School of Education and Behavioral Sciences is to offer undergraduate and graduate level educational opportunities to degree seeking students and life-long learners. The School provides undergraduate coursework in the fields of Education, Health and Physical Education, and Psychology and Human Ecology. These primary areas of study encompass several specialities. In addition to supporting general education preparation and undergraduate degrees, the School provides graduate degrees in Education and Behavioral Sciences. Several disciplines blend academics with field based and practica experiences as a regular part of the educational process.

Excellence in teaching and learning is highly prized and is viewed as the most significant role of the School and University. Faculty, students, and administration work interactively with communities by providing economic research support, cultural opportunities, and educational outreach experiences.

## DEPARTMENT OF

# Education 

CHAIR - Michelle Smith
Professors: Blackburn, Lanasa
Associate Professors: Robinson, Smith
Assistant Professors: Arnn, Bennett, Columbus, Dennis, Glazer, Hall, Hawkins, Hoppe, McClure
Megert, Reynolds
Instructors: Billingslea, Corrales, Newman, Stoll, Wethern, White
Undergraduate Advisor: Rogers

The Department of Education offers programs leading to the Bachelor of Science Degree with a major in Elementary Education and to the Bachelor of Science degree with a major in Early Childhood Education. The Department offers Master of Education and Master of Science degrees. Refer to the Graduate Catalog for details. The Department also offers an Associate in Applied ScienceEarly Childhood Education and Care.

## TEACHER EDUCATION

Teacher Education Programs at Cameron University are accredited by the Oklahoma Commission for Teacher Preparation and the National Council for the Accreditation of Teacher Education (NCATE). Approved graduates will be recommended for teaching licenses in the elementary and secondary schools of Oklahoma. Cameron University also holds membership in the American Association of Colleges for Teacher Education.

## TEACHER LICENSING AND CERTIFICATION

Cameron University offers programs of study which prepare students to teach at the early childhood, elementary, elementary-secondary, and secondary levels. The student who satisfactorily completes such a course of study is recommended to the State Department of Education for an Oklahoma teaching license. (Teaching licenses are issued only to those who have passed the state's tests for certification. For further information about these tests, contact the Director of Teacher Education.)

Oklahoma law provides that licensed teachers be assisted through their first year of teaching by a three-member Residency Committee. After the licensed teacher successfully completes the resident year, the Residency Committee will recommend to the State Department of Education that the licensed teacher receive an Oklahoma certificate.

NOTE: Rules and regulations governing teacher education established by the Oklahoma State Regents for Higher Education, Oklahoma Commission for Teacher Preparation, Oklahoma State Board of Education, and the state legislature are being modified. The programs outlined in this catalog meet current interpretation of these policies. Students should frequently check with their advisors for up-to-date information regarding teacher education.

## Early Childhood (PK-3)

Cameron offers a Teacher Education program to prepare students to teach at PK-3 level in the schools of Oklahoma.

The Associate in Applied Science - Early Childhood Education and Care degree prepares students for teaching in Headstart and other daycare programs. The AAS-ECEC does not prepare students for state licensure in public schools, PK-3.

## Elementary (K-8)

Students majoring in Elementary Education may be recommended for a Standard Oklahoma Elementary Teaching License. See the catalog section which deals with the Department of Education.

## Secondary

Students attending Cameron University may pursue programs of study for an Oklahoma teaching license at the secondary level. Teacher Education programs are available to Cameron students in the following areas: Biology, Chemistry, English, Mathematics, and Social Studies. For a list of the required courses in these fields of specialization, refer to the specific discipline area in this catalog.

Secondary Education majors must demonstrate foreign language proficiency (listening and speaking) at the novice-high level as defined by the American Council on the Teaching of Foreign Languages.

## Elementary - Secondary <br> PK-12

Students may pursue programs of study in Romance Languages Education (French and Spanish) and Physical Education which will allow them to be recommended for a teaching license for the elementarysecondary levels. For a list of the required courses in these fields of specialization refer to the specific discipline area in this catalog.

Elementary-Secondary Education majors must demonstrate foreign language proficiency (listening and speaking) at the novice-high level as defined by the American Council on the Teaching of Foreign Languages.

## Admission to Teacher Education

Admission to teacher education is achieved through a formal process. Requirements for admission to Teacher Education are as follows:
(a) A grade of C or better in: ENGL 1113, ENGL 1213, COMM 1113 , MATH 1513 or higher, HIST 1483 or 1493, PS 1113 and 2 Humanities.
(b) A grade of S in EDUC 1800.
(c) Concurrent enrollment OR a grade of C or better in EDUC 3003, EDUC 3733, Science (Biology or Physical Science). (Students concurrently enrolled in EDUC 3003 must provide a grade check of C or better.*)
(d) Passing scores on the Nelson Denny reading test (taken during Intro class) and OGET.
(e) Maintain GPA of 2.5 at all times.
(f) Presentation of portfolio at the emergent level of competency at the Teacher Education interview.
(g) Three positive recommendation forms.
*If the student receives a grade below C or a grade of I , the admission to Teacher Education will be revoked, any enrollments in restricted classes for the upcoming semester will be dropped, and the student will have to reapply for admission.

## BACHELOR OF SCIENCE DEGREE MAJOR IN ELEMENTARY EDUCATION (350)


#### Abstract

I. GENERAL EDUCATION REQUIREMENTS 50 hours General Education requirements are found on the red striped pages. Elementary Education majors must complete twelve (12) semester hours in each of the following areas: mathematics, social sciences, sciences, and English.


Elementary Education majors should
(a) select MATH 1513 or 1813 to meet the Mathematics requirement.
(b) choose HLTH 1012 as 2 hours of the Physical Education requirement.
(c) choose PSY 1113 (a prerequisite to EDUC 3733) to meet the Behavioral Science requirement.
(d) choose a social studies course and a science course as General Education electives.
(e) demonstrate foreign language proficiency (listening and speaking) at the novice-high level as defined by the American Council on the Teaching of Foreign Languages by taking a foreign language course or by passing a Department of English and Foreign Languages proficiency test.
II. MAJOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 36 hours

## Required Courses

MATH 3353 or elective, MATH 3363 or elective, MATH 1513 or above, LIBS 3423, EDUC 3513, EDUC 3533, EDUC 4423 (R), EDUC 4443 (R), EDUC 4463 (R), EDUC 4483 (R), EDUC 4553 (R), EDUC 3023, LANG elective or Successful Proficiency Test.
III. PROFESSIONAL EDUCATION . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 36 hours EDUC 1800, EDUC 3003, EDUC 3013, SPED 3103, EDUC 3733, EDUC 3753 (R), EDUC 3673, EDUC 4653 (R), *EDUC 4935 (R), *EDUC 4945 (R), *EDUC 3612, EDUC 4313 (R).

* Should be taken in the professional semester.
(R) Restricted to students admitted to Teacher Education.


## IV. ELECTIVES TO COMPLETE 124 HOURS REQUIRED FOR GRADUATION.

V. Students must achieve a grade of C or better in Elementary Education Major courses and the Professional Education courses and courses that fulfill the state $4 \times 12$ requirement, whether taken with an Education prefix or a prefix from another department, in order to receive credit toward a degree. If a grade of $D, F$, or $U$ is achieved, the course must be repeated. This policy will not affect courses for the $4 \times 12$ taken prior to Fall 1993 except for transfer courses which must be a $C$ or better. No grade below C in the Elementary Education major or Professional Education is accepted, regardless of when taken.

## Teacher Licensure/Certification

The student who completes the requirements for this degree and passes the state tests for certification in Elementary Education will be eligible to apply for a teaching license.

## BACHELOR OF SCIENCE DEGREE MAJOR IN EARLY CHILDHOOD EDUCATION (355)

I. GENERAL EDUCATION REQUIREMENTS

50 hours
General Education requirements are found on the red striped pages.
Early Childhood Education majors must complete twelve (12) semester hours in each of the following four areas: mathematics, social sciences, sciences, and English (state $4 \times 12$ requirement).

Early Childhood Education majors should
(a) choose PSY 1113 (a prerequisite to EDUC 3733) to meet the Behavioral Science requirement.
(b) choose MATH 1513 or 1813 to meet the Mathematics requirement.
(c) choose PHIL 1113 or 2213 as 3 hours of the Humanities requirement.
(d) choose from ART 1013, ART 2613, ART 2623, THTR 1103, FNAR 1013, MUSC 1013, MUSC 1023, MUSC 1033, or MUSC 1413 to meet the other 3 hours of the Humanities requirement.
(e) choose a social studies course and a science course as General Education electives.
(f) demonstrate foreign language proficiency (listening and speaking) at the novice-high level as defined by the American Council on the Teaching of Foreign Languages by passing a Department of English and Foreign Languages proficiency test or by taking a foreign language course.
II. MAJOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 41 hours

Required Courses
ECE 2163, ECE 3023, ECE 3154, ECE 3303, ECE 4144, EDUC 3513, EDUC 4423 (R), EDUC 4463 (R), EDUC 4553 (R), LIBS 3423, MATH 1513 or above, MATH 3353 or math elective, MATH 3363 or math elective.
(R) Restricted to students admitted to Teacher Education.
III. PROFESSIONAL EDUCATION ......................................... . . . . . . . . . . 33 hours ECE 4653 (R), EDUC 1800, EDUC 3003, *EDUC 3612, EDUC 3673, EDUC 3733, EDUC 3753(R), EDUC 4313 (R), *EDUC 4935 (R), *EDUC 4995 (R), SPED 3103.

* Should be taken in the professional semester.
(R) Restricted to students admitted to Teacher Education.


## IV. ELECTIVES TO COMPLETE 124 HOURS REQUIRED FOR GRADUATION.

V. Students must achieve a grade of C or better in Early Childhood Education major courses, Professional Education courses, and courses that fulfill the state $4 \times 12$ requirement, whether taken with an Education prefix or a prefix from another department, in order to receive credit toward a degree. If a grade of $D, F$, or $U$ is achieved, the course must be repeated. This policy will not affect courses for the $4 \times 12$ taken prior to Fall 1993 except for transfer courses which must be a C or better. No grade below C in the Early Childhood major or Professional Education is accepted, regardless of when taken.

## Teacher Licensure/Certification

The student who completes the requirements for this degree and passes the state tests for certification in Early Childhood Education will be eligible to apply for a teaching license.

## ASSOCIATE IN APPLIED SCIENCEEARLY CHILDHOOD EDUCATION AND CARE (500)

## I. GENERAL EDUCATION REQUIREMENTS <br> All General Education courses listed here will apply toward a Bachelor's degree. <br> Computer literacy is recommended before taking college classes. Zero level <br> classes may be necessary before entering some college courses.

## Required Courses

ENGL 1113, ENGL 1213, COMM 1113, PSY 1113, PS 1113, HIST 1483/1493, MATH 1513/1813.

Select six (6) hours from the following courses:
HUMANITIES (Art or Music Appreciation, American Popular Music, or Conversational Language), HLTH 1012 (Wellness and Exercise),
SCIENCE (General Biology, General Physical Science, Earth Science).
II. EARLY CHILDHOOD EDUCATION AND CARE ................................. 33 hours

Required Courses:
ECEC 1123, ECEC 1113, *ECE 2163, ECEC 1213, ECEC 1223, SP ED 2103, FAMS 3143, ECEC 2233.

Select six (6) hours from the following technical support courses:
ECE 4403, ECEC 2223, ECEC 2143, FAMS 1123, ECEC 2123.
Select three (3) hours from the following technical-related courses (at least 2 practicum classes must be taken):
ECEC 1111, ECEC 1221, ECEC 2111, ECEC 2211, ECEC 2881.
*Denotes classes that apply to the Bachelor of Science Degree in Early Childhood Education.

## EARLY CHILDHOOD EDUCATION AND CARE COURSES (ECEC)

## 1111 INFANT PRACTICUM, 1 hour credit

Supervised practical experiences with infants (birth-12 months) in the workplace. This course requires 100 clock hours in the workplace. Prerequisites: ECEC 2122 or concurrent enrollment and consent of instructor which includes arrangements for the practicum site prior to enrollment.

## 1113 CHILD GROWTH AND DEVELOPMENT, 3 hours credit

The principles of physical, intellectual, emotional, social and linguistic development of children from diverse cultural backgrounds are studied.

## 1123 INTRODUCTION TO EARLY CARE AND EDUCATION, 3 hours credit

An introduction to the profession of early childhood education focusing on developmentally appropriate practices, types of programs, historical perspectives, ethics, current issues, and what it means to be a professional.

## 1213 CURRICULUM RESOURCES AND ACTIVITIES, 3 hours credit

The course focuses on a developmentally appropriate activity-oriented approach to curriculum for young children.

## 1221 TODDLER PRACTICUM, 1 hour credit

Supervised practical experiences with toddlers (12-36 months) in the workplace. This course requires 100 clock hours in the workplace. Prerequisites: ECEC 2122 or concurrent enrollment and consent of instructor which includes arrangements for the practicum site prior to enrollment.

## 1223 CHILD GUIDANCE, 3 hours credit

An exploration of common behavioral problems of young children with emphasis on positive guidance techniques.

## 2111 YOUNG CHILD PRACTICUM, I hour credit

Supervised practical experiences with young children (3-5 years) in the workplace. This course requires 100 clock hours in the workplace. Prerequisites: ECEC 1222 or concurrent enrollment and consent of instructor which includes arrangements for the practicum site prior to enrollment. ECEC 1212 is recommended.

## 2123 INFANTS AND TODDLERS, 3 hours credit

A study of individualized techniques and activities necessary to provide high-quality care for infants and toddlers in a child care setting.

## 2211 SCHOOL AGE PRACTICUM, 1 credit hour

Supervised practical experiences with school age children ( $5-8$ years) in the workplace. This course requires 100 clock hours in the workplace. Prerequisites: ECEC 1222 or concurrent enrollment and consent of instructor which includes arrangements for the practicum site prior to enrollment. ECEC 1212 is recommended.

## 2223 ADMINISTRATION OF EARLY CHILDHOOD PROGRAMS, 3 hours credit

A practical approach to the management procedures for operating, supervising, and evaluating programs for young children.

2233 LITERACY FOR CHILDREN, 3 hours credit
A study of principles, methods, and materials for helping young children develop literacy using developmentally appropriate practices.

## 2881 SPECIAL TOPICS, 1 hour credit

Directed individual or group study of selected topic(s) in Early Childhood Education Care. The course may be repeated for additional credit with departmental permission. Prerequisite: As listed for each separate offering and/or departmental permission.

## EARLY CHILDHOOD EDUCATION COURSES (ECE)

## 2163 HEALTH, SAFETY AND NUTRITION FOR YOUNG CHILDREN, 3 hours credit

A course for students working in an early childhood educational setting, for child caregivers, and for adults and parents who desire additional information about current concepts in the fields of health, safety, and nutrition and their relationship to the young child.

## 3154 METHODS AND PRACTICUM IN EARLY CHILDHOOD EDUCATION, 4 hours credit

Methods and practice in instruction and guidance of young children. Emphasis on developmental processes and motor skills. A field component is required. Lecture 3 hours.

## 3303 HOME, SCHOOL AND COMMUNITY, 3 hours credit

Overview of the impact of home, school, and community relationships as they affect the total educational experience of the child from birth through age eight. Examines the importance of parental involvement in the schools and a variety of community resources available to both educators and parents that enhance the educational experiences of the child. Techniques to develop and maintain home, community, and school communications will be explored.

3801-3 WORKSHOP IN EARLY CHILDHOOD EDUCATION, 1 -3 hours credit
Course designed to give intensive emphasis of specific topic(s) related to early childhood education. May be repeated with different topics for a total of 3 hours. Prerequisite: Junior standing.

## 3841-3 SELECTED TOPICS IN EARLY CHILDHOOD EDUCATION, $1-3$ hours credit

Directed study on a special subject or problems in early childhood education. May be repeated with different topics for a total of 3 hours. Prerequisite: Junior standing.

## 4144 METHODS AND PRACTICUM IN COGNITIVE DEVELOPMENT, 4 hours credit

Focuses on designing and delivering appropriate experiences in early literacy, math, science, social studies and language for the young child. Additionally requires field experience in early childhood settings arranged with instructor. Prerequisite: ECE 3154 recommended. Lecture 3 hours.

## 4403 EARLY CHILDHOOD EDUCATION, 3 hours credit

Focuses on international and interdisciplinary perspectives of child care and early childhood education. Includes historical and philosophical background of early childhood education. Needs of families and best practices for young learners are emphasized. Lecture 3 hours.

## 4412 CREATIVE PLAY AND PLAYGROUNDS FOR THE YOUNG CHILD, 2 hours credit

Methods of identifying attributes of play and playgrounds in terms of skill development and investigates techniques of interaction to facilitate those skills. Emphasis is placed on the knowledge and sensitivity of the teacher as one who develops an environment to promote cognitive and affective growth and psychomotor skills.

## 4653 ASSESSMENT OF YOUNG CHILDREN, 3 hours credit

Includes selection, design, administration, and interpretation of a variety of assessment methods, including alternative, authentic assessment of young children. Focuses on current research and practical guides for integrating assessment with teaching. Use of assessment results to make instructional decisions, plan instructional activities and develop appropriate grading practices. Communication of results to students, parents, educators, and the community. Prerequisite: Admission to Teacher Education. Lecture 3 hours.

## EDUCATION COURSES (EDUC)

## 0123* COLLEGE READING FUNDAMENTALS (Remedial/Developmental Course)

- Assists students in development of basic reading, vocabulary and study skills needed to attempt college study or other advanced study. Diagnostic testing provides a basis for individualized and small group activities to improve student skills DOES NOT COUNT TOWARD GRADUATION. May be repeated for a maximum of 6 hours credit. Lecture 2 hours, laboratory 2 hours.


## 0521 DEVELOPMENTAL READING LABORATORY, 1 hour credit

For students with ACT scores between 15-18 or comparable CPT placement scores. Students work on individualized programs to improve reading skills and strategies identified in testing. DOES NOT COUNT TOWARD GRADUATION. Concurrent enrollment in EDUC 1113 strongly recommended. Laboratory 2 hours.

## 1113 COLLEGE READING AND STUDY STRATEGIES

Prepares students for success in college with emphasis on study strategies as applied in various content areas, academic reading/thinking strategies, and an evaluation of individual strengths and weaknesses as a student. For students with ACT scores 15 and above. Lecture 3 hours.

## 1800 EDUCATION INTRODUCTORY SEMINAR

A required seminar for all declared education majors to be taken before admission to teacher education. Provides overview of the teacher education program's conceptual framework, academic requirements certification requirements and guidelines for development of the professional portfolio.

## 2881-3 SELECTED TOPICS IN EDUCATION, 1-3 hours credit

Directed individual or group study of selected topics in education. The course may be repeated for additional credit with departmental permission. Prerequisite: As listed for each separate offering and/or departmental permission.

## 3003* INTRODUCTION TO TEACHING, 3 hours credit

An introductory course in education prerequisite to most education courses; introduces students to role of education in a democratic society, basic principles and techniques of teaching, scope and organization of public school system in the United States, and place of teacher in school and community. Additionally requires field component in the public schools. Prerequisite: Second Semester Freshman standing. Lecture 3 hours.

## 3013* CULTURAL FOUNDATIONS OF EDUCATION, 3 hours credit

A survey of the development of education in the United States with emphasis on the influence of culture on educational theory and practice. Both philosophies and practices historically dominant in education in the United States and perspectives arising from cultural diversity will be explored. Lecture 3 hours.

## 3023 CREATIVE EXPERIENCESFOR EARLY CHILDHOOD AND ELEMENTARY SCHOOL: AN INTEGRATED APPROACH, 3 hours credit

The study of art, music, drama, and dance appropriate for early childhood and elementary school children. Emphasis will be placed on the fundamentals of art, music, drama, and dance as well as the integration of aesthetic and creative experiences into the elementary curriculum. Includes field experience.

## 3073 SURVEY OF SECONDARY INSTRUCTIONAL STRATEGIES, 3 hours credit

Survey of general secondary teaching and learning methods as applied to varied content. Focus on planning, materials, grouping, communications, record keeping, presentation styles, learner styles and needs, and effective/reflective teaching techniques. Additionally, required field component in the public schools. Prerequisite: Departmental approval. Lecture 3 hours.

## 3513 TEACHING PRIMARY READING, 3 hours credit

Principles and practice of teaching reading grades K through 3 with emphasis on emerging literacy and beginning reading skills. Prerequisite: LIB SC 3423 or departmental permission required. Lecture 3 hours.

## 3533 TEACHING INTERMEDIATE/MIDDLE SCHOOL READING, 3 hours credit

Principles and practices of teaching reading in grades 4 through 8 with emphasis on development of vocabulary and comprehension and the place of literature in the reading program. Prerequisite: EDUC 3513.

## 3612 CLASSROOM MANAGEMENT, 2 hours credit

The study of effective practices of classroom management, motivation, and disciplinary methodologies.

## 3673 MEDIA AND TECHNOLOGY IN EDUCATION, 3 hours credit

The study of Instructional Technology as a theory and practical process for aiding in the learning process. The course includes techniques and technology used in planning, selection, production, utilization, and evaluation of a variety of instructional materials and computer related technologies. Lecture 3 hours. Prerequisite: EDUC 3003.

## 3733* DEVELOPMENTAL PSYCHOLOGY, 3 hours credit

A survey of the physical, mental, social, moral, and emotional development of the individual from conception through adolescence. For students in teacher education programs. Will not count toward major or minor in Psychology. Prerequisite: PSYCH 1113.

## 3753* EDUCATIONAL PSYCHOLOGY, 3 hours credit

Introduction to the behavioral and cognitive sciences in education; application of current research and theories of learning, intelligence and motivation to classroom practice. Additionally requires field component in the public schools. Prerequisites: EDUC 3733 and admission to Teacher Education. Lecture 3 hours.

## 3881-2 WORKSHOP, 1 - 2 hours credit

Course designed to give intensive emphasis of specific topic(s) related to elementary and/or secondary education. May be repeated for a maximum of 4 hours credit. Prerequisites: Junior standing and departmental permission.

## 4313 PRACTICUM IN ASSESSMENT AND INSTRUCTION, 3 hours credit

A pre-service teaching experience in the public school, taught in conjunction with a lecture class on campus. Observation and participation under public school teacher guidance. Additionally, requires sixty hours field component in the public schools.

## 4423 LANGUAGE ARTS METHODS, 3 hours credit

An elementary methods course emphasizing language arts integrated with other content areas. Focus on listening, speaking, reading, writing, viewing and visually representing with elementary schools applications. Prerequisite: Admission to Teacher Education. Lecture 3 hours.

## 4443 SOCIAL STUDIES METHODS, 3 hours credit

An elementary methods course emphasizing social studies integrated with other content areas. Focus on history, geography, economics, sociology, anthropology, and civics with intermediate/middle school applications. Prerequisite: Admission to Teacher Education. Lecture 3 hours.

## 4463 MATHEMATICS METHODS, 3 hours credit

An elementary methods course emphasizing mathematics integrated with other content areas. Focus on arithmetic and mathematical processes with elementary school applications. Additionally requires a supervised field component. Prerequisite: Admission to Teacher Education. Lecture 3 hours.

## 4483 SCIENCE METHODS, 3 hours credit

An elementary methods course emphasizing science integrated with other content areas. Focus on physical, life, and earth disciplines of science with elementary school applications. Prerequisite: Admission to Teacher Education. Lecture 3 hours.

## 4533 READING IN THE CONTENT AREA, 3 hours credit

Theories and practices of reading instruction for middle school and secondary teachers. Assists teachers in the development of instructional strategies to facilitate student understanding of written materials.

## 4553 DIAGNOSIS AND REMEDIATION OF READING DIFFICULTIES, 3 hours credit

A study of reading difficulties and techniques of remediation of such difficulties. Additionally requires 10 hours supervised field component with a child with reading problems. Prerequisites: EDUC 3533 and Admission to Teacher Education. Lecture 3 hours.

## 4613 PROFESSIONAL EDUCATION SEMINAR, 3 hours credit

Capstone experience focusing on classroom dynamics, creating positive learning environments, reflective teaching and professionalism. A complete portfolio will be required. Preréquisite: Admission to Professional Semester.

## 4653 CLASSROOM ASSESSMENT, 3 hours credit

Selection, design, administration, and interpretation of a variety of assessment methods. Use of assessment results to make instructional decisions, plan instructional activities, and develop appropriate grading practices. Communication of results to students, parents, educators, and the community. Prerequisite: Admission to Teacher Education. Lecture 3 hours.

## 4672 SECONDARY PROFESSIONAL EDUCATION SEMINAR, 2 hours credit

Secondary Education Capstone Experience focusing on classroom management, positive learning environments, reflective teaching, and professional interaction in the school environment with faculty and staff, parents, and community members. Includes portfolio evaluation and practicum experience in the public schools. Prerequisite: Admission to Professional Semester.

## 4815 DIRECTED OBSERVATION AND INTERNSHIP IN THE ELEMENTARY SCHOOLMILD/MODERATE DISABILITIES, 5 hours credit

Students observe, participate, and teach in elementary school special education settings under the supervision and guidance of a special education mentor teacher and university supervisor. A professional education seminar is included. Prerequisites: Admission to professional semester, SPED 3203, SPED 3263, SPED 3223, SPED 3243, SPED 4453, and SPED 4413 or SPED 4433.

## 4825 DIRECTED OBSERVATION AND INTERNSHIP IN THE ELEMENTARY SCHOOLSEVERE/PROFOUND/MULTIPLE DISABILITIES, 5 hours credit

Students observe, participate, and teach in elementary school special education settings under the supervision and guidance of a special education mentor teacher and university supervisor. A professional education seminar is included. Prerequisites: Admission to professional semester, SPED 3203, SPED 3263 , SPED 3223, SPED 3243, SPED 4453, and SPED 4413 or SPED 4433.

## 4835 DIRECTED OBSERVATION AND INTERNSHIP IN THE SECONDARY SCHOOL MILD/MODERATE DISABILITIES, 5 hours credit <br> Students observe, participate, and teach in secondary school special education settings under the supervision and guidance of a special education mentor teacher and university supervisor. A professional education seminar is included. Prerequisites: Admission to professional semester, SPED 3203, SPED 3263, SPED 3223, SPED 3243, SPED 4453, and SPED 4413 or SPED 4433.

## 4845 DIRECTED OBSERVATION AND INTERNSHIP IN THE SECONDARY SCHOOL-SEVERE/ PROFOUND/MULTIPLE DISABILITIES, 5 hours credit

Students observe, participate, and teach in secondary school special education settings under the supervision and guidance of a special education mentor teacher and university supervisor. A professional education seminar is included. Prerequisites: Admission to professional semester, SPED 3203, SPED 3263, SPED 3223, SPED 3243, SPED 4453, and SPED 4413 or SPED 4433.

## 4881-3 SELECTED TOPICS IN EDUCATION, 1 - 3 hours credit

Directed group study on a special subject or problem, based upon existing methods and/or instructional techniques which are applicable to teaching in all content areas. Prerequisite: EDUC 3003. May be repeated with departmental approval.

## 4891-3 SPECIAL STUDIES, $1-3$ hours credit

Directed individual study in selected areas of education through research, readings, reports and/or on-site internship. Evaluation will be based on completion of an approved plan of study, with conferences and/or written reports. May be repeated for a total of 3 hours credit. Prerequisites: Junior standing and departmental permission.

## 4935 DIRECTED OBSERVATION AND INTERNSHIP IN PRIMARY GRADES, 5 hours credit

Elementary Education majors observe, participate and teach in primary grade classrooms under the supervision and guidance of a mentor teacher and university supervisor. A professional education seminar is included. Prerequisite: Admission to professional semester.

## 4945 DIRECTED OBSERVATION AND INTERNSHIP IN INTERMEDIATE/MIDDLE SCHOOL GRADES, 5 hours credit

Elementary Education majors observe, participate and teach in intermediate/middle school classrooms under the supervision and guidance of a mentor teacher and university supervisor. A professional education seminar is included. Prerequisite: Admission to professional semester.

4955 DIRECTED OBSERVATION AND INTERNSHIP IN ELEMENTARY SCHOOL, 5 hours credit Students majoring in PK-12 subject areas (i.e., foreign languages, health and physical education, etc.) observe, participate and teach in elementary school classrooms under the supervision and guidance of a mentor teacher and university supervisor. A professional education seminar is included. Prerequisite: Admission to professional semester.

## 4965 DIRECTED OBSERVATION AND INTERNSHIP IN JUNIOR HIGH/MIDDLE SCHOOL, 5

## hours credit

Secondary education majors observe, participate, and teach in junior high/middle school classrooms under the supervision and guidance of a mentor teacher and university supervisor. A professional education seminar is included. Prerequisite: Admission to professional semester.

## 4975 DIRECTED OBSERVATION AND INTERNSHIP IN SENIOR HIGH SCHOOL, 5 hours credit

Secondary education majors observe, participate, and teach in senior high school classrooms under the
supervision and guidance of a mentor teacher and university supervisor. A professional education seminar is included. Prerequisite: Admission to professional semester.

## 4985 DIRECTED OBSERVATION AND INTERNSHIP IN SECONDARY SCHOOL, 5 hours credit

Students majoring in PK-12 subject areas (i.e., foreign languages, health and physical education, etc.) observe, participate, and teach in secondary school classrooms under the supervision and guidance of a mentor teacher and university supervisor. A professional education seminar is included. Prerequisite: Admission to professional semester.

## 4995 DIRECTED OBSERVATION AND INTERNSHIP IN EARLY CHILDHOOD, 5 hours credit

Early childhood education majors and elementary education majors who have completed early childhood prerequisites, observe, participate, and teach in early childhood classrooms under the supervision and guidance of an early childhood mentor teacher and university supervisor. A professional education seminar is included. Prerequisite: Admission to professional semester, ECE 2163, ECE 3154, ECE 4144, ECE 4403, FAMS 1123, FAMS 3143.

## LIBRARY SCIENCE COURSES (LIBS)

## 3113 MATERIALS SELECTION, 3 hours credit

Methods of selecting and acquiring books, pamphlets, and audiovisual materials for the library through publishers and other sources; use of tools and aids. Lecture 3 hours.

## 3123 SCHOOL LIBRARIES, 3 hours credit

Organization, administration, and planning of elementary and secondary school library media programs. Lecture 3 hours.

## 3223 REFERENCE MATERIALS, 3 hours credit

Selection, evaluation, and use of basic reference materials; interpretation of reference questions; library reference work. Lecture 3 hours. No prerequisites.

## 3423* CHILDREN'S LITERATURE, 3 hours credit

General survey of the literature available for children. Criteria for evaluation of materials in terms of needs, interests, and abilities of children. Methods of selecting books and introducing them to children. Lecture 3 hours.

## 4013 ORGANIZATION OF LIBRARY MATERIALS, 3 hours credit

Introduction to descriptive and subject cataloging, filing rules, Dewey and Library of Congress classification schemes, automated cataloging procedures, and production of card sets. Emphasis on interpreting catalog entries to be found in general libraries. Lecture 3 hours.

## 4041-4 SEMINAR IN LIBRARY SCIENCE, 1 - 4 hours credit

Special topics in library science. Lecture 1 to 4 hours. Prerequisite: Minimum of 3 hours in library science or permission of the instructor.

## 4313* YOUNG ADULT LITERATURE, 3 hours credit

Survey of young adult literature, methods of selection and presentation of literature in all media, reading guidance and motivation of young adults.

## SPECIAL EDUCATION COURSES (SPED)

## 2103 THE YOUNG CHILD WITH SPECIAL NEEDS, 3 hours credit

This course introduces teachers, service providers and paraeducators to early childhood special education and intervention methods. The course will focus on children from birth to age five who are at risk for school success due to such factors as congenital disorders, developmental problems, and environmental factors such as poverty, abuse, and cultural linguistic differences. This course cannot be included in the 15 hour Special Education requirement before internship.

## 3103* THE EXCEPTIONAL CHILD, 3 hours credit

Introduces pre-service teachers to characteristics, problems and special needs of exceptional children with specific application to the education of special needs students in general education classrooms (inclusion). Includes adaptation of curriculum and materials by the regular classroom teacher for students with exceptionalities and methods for teaching exceptional children and youth. Additionally requires ten (10) hour field component. Prerequisite: EDUC 3733 or PSY 3353. Lecture 3 hours.

## 3203 CHARACTERISTICS OF EXCEPTIONAL CHILDREN, 3 hours credit

A comprehensive overview of the characteristics of all exceptional children (Mild-Moderate and SevereProfound/Multiple Disabilities), the influence of the disability and other factors on the learning, behavior, and social interaction skills of students. Also requires a 4 hour field component. No prerequisites.

## 3223 ASSESSMENT AND EVALUATION IN SPECIAL EDUCATION, 3 hours credit

Psychological and educational diagnostic evaluation of exceptional learners. Study of assessment instruments: their construction, selection, administration, use in diagnosis and placement of exceptional individuals (ages 0-21).

## 3243 BEHAVIOR INTERVENTION AND MANAGEMENT, 3 hours credit

Methods for managing behavior problems and developing social-emotional skills including behavior modifications, precision teaching techniques, organization of classroom and materials to promote student learning, methods to motivate students, and contingency contracting.

## 3263 FOUNDATIONS OF SPECIAL EDUCATION, 3 hours credit

Philosophical, historical and legal foundations of special education. Professionalism. ethical practices, individualized education plans, least restrictive environment, and communication and collaboration skills will be addressed. No prerequisites.

3713 INTRODUCTION TO SPEECH, HEARING, AND LANGUAGE DISORDERS, 3 hours credit
Introduces techniques for identifying and remediating speech, hearing, and language disorders (ages 0-21)
Emphasizes the role of both the classroom teacher and the special educator in the identification and remediation processes.

## 3803 SPECIAL TOPICS IN SPECIAL EDUCATION, 3 hours credit

Topics of special interest in special education. May be repeated once with a change of topic. Prerequisite: Departmental permission.

## 3821-3 WORKSHOP IN SPECIAL EDUCATION, 1 - 3 hours credit

Selected educational procedures and policies and/or activities for use in classrooms. Course may be repeated with different topics. May be repeated for a maximum of 4 hours credit. Prerequisites: Junior standing and departmental permission.

## 4413 TEACHING STUDENTS WITH MILD/MODERATE DISABILITIES, 3 hours credit

Techniques of diagnosis and remediation of learning problems in academic areas with emphasis on reading, language arts, mathematics and functional academics. The application of educational interventions and how to locate, construct, select, use, and evaluate media and materials, including assistive and adaptive technology. Also requires a 4 hour field component. Prerequisite: SPED 3203 or departmental permission.

## 4433 TEACHING STUDENTS WITH SEVERE-PROFOUND/MULTIPLE DISABILITIES, 3 hours credit

This course provides participants with an understanding of the instructional needs of students with mental retardation and multiple disabilities who require extensive to pervasive supports. The needs of students with autism are also addressed. The planning of systematic instructional intervention selecting and organizing of curriculum content and program evaluation will be included. Also requires a 4 hour field component. Prerequisite: SPED 3203 and SPED 3243 or departmental permission.

## 4453 TEACHING STUDENTS WITH EMOTIONAL DISTURBANCE/BEHAVIOR DISORDERS, 3 hours credit

This course equips participants with skills needed for instructional programming applicable to the education of students with severe emotional disturbance and behavior disorders. Prerequisite: SPED 3203 and SPED 3243 or departmental permission.

## 4621 PRACTICUM MILD/MODERATE DISABILITIES, 1 hour credit

Observation and participation in educational settings which serve children and youth with mild to moderate disabilities with application of learned competencies. May be repeated for a total of 3 semester hours credit. Prerequisite: SPED 4413 or concurrent enrollment.

## 4641 PRACTICUM SEVERE-PROFOUND/MULTIPLE DISABILITIES, 1 hour credit

Observation and participation in educational settings which severe children and youth with severeprofound/multiple disabilities with application of learned competencies. May be repeated for a total of 3 semester hours credit. Prerequisite: SPED 4433 or SPED 4453 or concurrent enrollment.

## 4703 EDUCATION OF THE GIFTED CHILD, 3 hours credit

Introduces methods of identifying the gifted/talented child and surveys strategies, methods and techniques for teaching this child. Emphasis is placed on the role of the regular classroom teacher in the identification and educational processes. Lecture 3 hours.

See the Graduate School Catalog for course descriptions of graduate courses ( 5000 level) in special education.

* Liberal arts and sciences course


## DEPARTMENT OF

## HEALTH AND PHYSICAL EDUCATION

INTERIM CHAIR - Joe Jones, Assistant Professor<br>Assistant Professors: Adrian, Jones, Lavender<br>Instructors: Aguero, Dering, Hackerott, Helvey, Holland, Leitzke, Maloney, McAdams, Nye

## PROGRAMS IN HEALTH AND PHYSICAL EDUCATION

The Department of Health and Physical Education offers a Bachelor of Science degree in Physical Education and Health, and a Bachelor of Science degree in Physical Education. ,

Consult a departmental advisor regarding questions and/or advisement.

## BACHELOR OF SCIENCE DEGREE MAJOR IN HEALTH AND PHYSICAL EDUCATION (370)

I. GENERAL EDUCATION REQUIREMENT
50 hours
General Education requirements are found on the red striped pages.
II. MAJOR or MAJOR-MINOR ..... 47-65 hours

## Core Courses

 25 hoursHLTH 1053, HLTH 2213, HLTH 3012, HLTH 3244, HLTH 4503, HPET 2322, SFTY 3613; Physical Education Activity Courses (5 hours). Must include a course in aerobic conditioning, team sport, racquet sport, aquatic activity and dance, tumbling and gymnastics, or weight training. Courses in athletics or intramurals may not be used to meet this requirement.

## Concentration

22-57 hours
Majors must complete one of the following concentrations.
Physical Education and Health (Major - $\mathbf{3 0}$ hours)
FNS 1343, HLTH 3292, HLTH 3303, HPET 3332, HPET 3352, HPET 3362, HPET 4003, HPET 4203, HPET 4772, HPET 4781-2, HPET, HLTH, or SFTY Electives ( 5 hours), Physical Education Activity ( 3 hours).

Physical Education and Health (Major-Minor - 22 hours major, 18 hours minor)
FNS 1343, HLTH 3292, HLTH 3303, HPET 3332, HPET 3352, HPET 3362, HPET 4003, HPET 4203, HPET 4772, HPET 4781-2. Also requires the completion of an 18-hour minor.

Physical Education and Safety (Major-Minor - $\mathbf{3 5}$ hours)
FNS 1343, HLTH 3292, HLTH 3303, HPET 3332, HPET 3352, HPET 3362, HPET 4003, HPET 4203, HPET 4772, HPET 4781-2, SFTY 1001 (or other approved driver and safety education course), SFTY 3723, SFTY 3823, SFTY 4923, Physical Education Activity Electives (3 hours).

## Sport/Fitness Management (Major-Minor-57 hours)

HLTH 3292, HLTH 4553, HPET 3332, HPET 4003 OR 3563, HPET 4203, HPET 4772, HPET 3373, HPET 4782, HPET 4781, ACCTG 2013, BUS 2113 or TECH 3013, Computer electives ( 3 hours), FNS 1343, MKTG 3413, Practica ( 9 hours), Focused electives ( 12 hours)

Note: Minors are available in Athletic Coaching, Driver and Safety Education, Health and Physical Education and Health.
Note: A "C" grade or better will be required in the major-minor courses.

## III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION

## BACHELOR OF SCIENCE DEGREE MAJOR IN PHYSICAL EDUCATION (378)

I. GENERAL EDUCATION REQUIREMENTS ................................ 50 hours
General Education requirements are found on the red striped pages.

The Physical Education program requires specific courses for meeting General Education requirements in humanities, behavioral science, physical education activities and electives as follows:

Physical Education majors should
(a) choose PSY 1113 to meet the Behavioral Sciences requirement
(b) choose PHIL 1113 or 2213 as 3 hours of the Humanities requirement
(c) choose from ART 1013, ART 2613 , ART 2623, THTR 1103, FNAR 1013, MUSC 1013, MUSC 1023, MUSC 1033, MUSC 1413 to meet the other 3 hours of the Humanities requirement.
(d) choose an Aerobic Conditioning Activity, an Aquatic Activity, a Racquet Sports Activity, and a Dance, Tumbling, Gymnastics, or Weight Training Activity to meet the 4-hour Physical Education Activities requirement.
(e) choose the following courses as General Education electives:

1) Team Sports
2) HLTH 2213
3) ENGL 3013, or ENGL 3063 or ENGL 3075
(f) demonstrate foreign language proficiency (listening and speaking) at the novice-high level as defined by the American Council on the Teaching of Foreign Languages by passing a Department of English and Foreign Languages proficiency test or by taking a foreign language course.
II. MAJOR ................................................................................ 41 hours

Core Courses . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 25 hours
FNS 1343, HLTH 1053, HLTH 3303, HLTH 3292, HLTH 3012,
HLTH 3244, HLTH 4503, HPET 2322, HPET 4772, HPET 4203,
HPET 3332, HPET 3352, HPET 3362, HPET 4003, HPET 4781-2,
SFTY 3613

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III. PROFESSIONAL EDUCATION . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 33 hours
    EDUC 1800, EDUC 3003, SPED 3103, *EDUC 3612, EDUC 3673,
    EDUC 3733, EDUC 3753 (R), EDUC 4313 (R), EDUC }4653\mathrm{ (R),
    *EDUC 4955 (R), *EDUC 4985 (R)
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## Teacher Licensure/Certification

The student who completes the requirements for this degree and passes the state tests for certification in Physical Education will be eligible to apply for a standard teaching license.

Note: Persons planning to coach athletics should complete Theory of Coaching courses in two or more sports.
Note: A grade of " C " or better is required in all major courses and all professional education courses.

## HEALTH COURSES (HLTH)

## 1012* DIMENSIONS OF WELLNESS AND EXERCISE SCIENCE, 2 hours credit

A study of major wellness dimensions and their effect upon physiological, psychological, and neuromuscular parameters. Emphasis on a scientific basis of knowledge related to exercise, nutrition, and other wellness components. Lecture 2 hours.

## 1053* PERSONAL AND COMMUNITY HEALTH SCIENCE, 3 hours credit

Problems and practices concerning knowledge and attitudes related to self-direction of health behavior in both personal and community health.

## 2213 FIRST AID, 3 hours credit

Immediate and temporary treatment for accidental injuries and sudden illness.

## 3012 ADAPTED AND CORRECTIVES PHYSICAL EDUCATION, 2 hours credit

Principles and problems related to adapting physical activities and exercises to specific requirements of exceptional individuals. Lecture 2 hours.

## 3244* APPLIED ANATOMY AND KINESIOLOGY, 4 hours credit

The study of the mechanical and anatomical functions of human motion. (May not be used as a Biology course.) Lecture 4 hours.

## 3292 SPORTS MEDICINE I, 2 hours credit

Methods of caring for injuries to athletes. Lecture 2 hours.

## 3303 SCHOOL AND COMMUNITY HEALTH PROGRAMS, 3 hours credit

A study of the school and community health programs which will include: (1) health instruction, including curriculum; (2) health services, and (3) healthful school and community environment. Emphasis will be placed on health programs in school-community relations. Lecture 3 hours.

## 3321 SPECIAL STUDIES: CLINICAL EXPERIENCE IN ATHLETIC TRAINING, 1 hour credit

Independent study designed to allow students who are interested in becoming certified as athletic trainers to acquire practical experience in the athletic training environment under a nationally certified athletic trainer. National Certification requires 300 clock hours. May be repeated for a maximum 6 hrs .

## 4503* PHYSIOLOGY OF EXERCISE, 3 hours credit

A study of the physiological effects of physical exercise with instruction and practice for use of laboratory equipment and techniques utilized in the evaluation of human work capabilities. Lecture 2 hours, laboratory 2 hours. Prerequisite: HLTH 3244.

## 4553 EXERCISE PRESCRIPTION, 3 hours credit

Exercise prescription for normal and special populations. Competencies in physiological testing, exerciser prescription, exercise leadership, handicapping conditions, and exercise and aging are incorporated. Prerequisites: HLTH 3012 and HLTH 4503.

## 4613 METHODS AND MATERIALS IN HEALTH EDUCATION, 3 hours credit

Problem solving and conceptual approaches to teaching health education. (Evaluation techniques, selection and use of resources.) Emphasis will be placed on content selection and teaching methodology appropriate to elementary and secondary schools. Lecture 3 hours. Prerequisite: HLTH 3303 or departmental permission.

## 4292 SPORTS MEDICINE II, 2 hours credit

A study of methods of evaluation, managing, and treating sports related injuries specific to extremities and back area.

## 4392 SPORTS MEDICINE III, 2 hours credit

A study of methods of evaluation, managing, and treating sports related injuries specific to upper extremities, abdomen, thorax, head, and neck.

## HEALTH AND PHYSICAL EDUCATION THEORY COURSES (HPET)

2322 INTRODUCTION TO HEALTH, PHYSICAL EDUCATION AND RECREATION, 2 hours credit
A foundational approach to interpretations and objectives of Health, Physical Education and Recreation, with information on career opportunities and the necessary qualifications. Designed to assist the major in developing a sound philosophic background for continued growth in the professional field. Lecture 2 hours. (Recommended for Freshmen and Sophomore majors.)

## 2341-3 SPECIAL STUDIES, 1-3 hours credit

Directed independent study in selected areas of health, physical education and recreation through research, observation and/or on-the-job internship. May be repeated with a different topic for a total of 6 hours. Prerequisite: Departmental permission.

## 3052 SPORTS OFFICIATING I, 2 hours credit

Current rules, interpretation and techniques in sports officiating, with practical application in techniques and mechanics of officiating football, soccer and volleyball. Students with successful performance may be eligible to receive official ratings. Lecture 1 hour/laboratory 2 hours.

## 3062 SPORTS OFFICIATING II, 2 hours credit

Current rules, interpretation and techniques in sports officiating with practical application in techniques and mechanics of officiating baseball, basketball and wrestling. Students with successful performance may be eligible to receive official ratings. Lecture 1 hour/laboratory 2 hours.

## 3332 PHYSICAL EXAMINATION AND MEASUREMENTS, 2 hours credit

Methods in techniques of examination; forming and keeping records; elementary physical diagnosis. Lecture 2 hours.

## 3352 PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL, 2 hours credit

Program and management of games and activities including movement learning for elementary school age children. Concepts of health including wellness, fitness, and nutrition are explored. Lecture 2 hours.

## 3353 CAMP COUNSELING, 3 hours credit

A study of methods and content for leadership in camping and outdoor recreation. One weekend camp out required. Lecture 3 hours.

3362 PHYSICAL EDUCATION IN THE JUNIOR AND SENIOR HIGH SCHOOL, 2 hours credit Planning and management of activities with organization and practice in teaching of games and sports. Lecture 2 hours.

## 3363* COMMUNITY AND RECREATIONAL LEADERSHIP, 3 hours credit

Introductory course in the history, philosophy, organization, management, and materials of community and private recreation. Lecture 3 hours.

## 3373 THERAPEUTIC RECREATION, 3 hours credit

Planning and programming recreational activities and leisure-related experiences for individuals who have special impairments, such as chronic illness or physical, mental, emotional or social disability. Lecture 2 hours, laboratory 2 hours.

## 4003 ORGANIZATION AND ADMINISTRATION OF ACTIVITY-BASED PROGRAMS, 3 hours credit

A study of the organization and administration of activity-based programs and an analysis of the factors associated with their management. Lecture 3 hours.

## 4203 MOTOR LEARNING, 3 hours credit

An examination of the processes and the organismic and situational factors related to the acquisition and performance of motor skills. Lecture 3 hours. Prerequisites: HLTH 3012 and HLTH 3244.

4222 ORGANIZATION AND MANAGEMENT FOR RECREATIONAL SPORTS, 2 hours credit Intramural programs; evaluation of activities, use of test in forming competitive groups. Lecture 2 hours.

## 4542 THEORY OF COACHING TRACK AND FIELD, 2 hours credit

A study of the techniques of coaching track and field. Lecture 2 hours.
4552 THEORY OF COACHING OFFENSIVE FOOTBALL, 2 hours credit
A study of the techniques of coaching offensive football. Lecture 2 hours.
4562 THEORY OF COACHING DEFENSIVE FOOTBALL, 2 hours credit
A study of the techniques of coaching defensive football. Lecture 2 hours.

## 4572 ADVANCED THEORY OF COACHING FOOTBALL, 2 hours credit

An intensive study of modern techniques of coaching football. Lecture 2 hours.
4582 THEORY OF COACHING BASKETBALL, 2 hours credit
A study of the techniques of coaching basketball. Lecture 2 hours.

## 4592 THEORY OF COACHING BASEBALL, 2 hours credit

A study of the techniques of coaching baseball. Lecture 2 hours.
4772 METHODS OF TEACHING PHYSICAL EDUCATION, 2 hours credit
Problems and methods in the teaching of Physical Education. Lecture 2 hours.

## 4781-4 SPECIAL STUDIES, 1 -4 hours credit

Directed independent study in selected areas of Health, Physical Education and Recreation through research, observation, and/or on-the-job internship. May be repeated with a different topic to a total of 9 hours. Prerequisites: Junior standing and departmental permission.

## PHYSICAL EDUCATION ACTIVITY COURSES (PE)

## 1001 AEROBICS, 1 hour credit

A scientific, systematic approach to pulmonary, cardiovascular conditioning and training. Fitness classifications will be determined, and an appropriate individual exercise program will be selected. Laboratory 2 hours. Prerequisite: Physician's examination or approval.

## 1002 LIFE TIME SPORTS, 2 hours credit

Development and practice in a variety of individual and dual sports skills that will contribute to the enjoyment and life-time participation of sports. Laboratory 4 hours.

## 1021 TEAM SPORTS, 1 hour credit

Fundamentals of Basketball, Football, Soccer, Speedball, Softball, and Volleyball. Four to five of these sports are incorporated in the class with instruction and practice in basic skills followed by participation as a member of a team. Laboratory 2 hours.

## 1022 FOUNDATIONS OF PHYSICAL ACTIVITY, 2 hours credit

Emphasizes a meaningful understanding of the "why" of physical activity through experiences illustrating the effects of exercise in five basic areas: social, emotional, organic, neuromuscular, and interpretative. Laboratory experiences and practical applications are provided. laboratory 2 hours, Lecture 1 hour.

## 1041 TUMBLING AND GYMNASTICS, 1 hour credit

Introduction to basic skills in tumbling, gymnastics apparatus and trampoline. Laboratory 2 hours.

## 1051 INTERMEDIATE GYMNASTICS, 1 hour credit

Introduction and development in tumbling and gymnastics routines or apparatus and trampoline. Laboratory 2 hours. Prerequisite: Beginning gymnastics or instructor's permission.

## 1081 PHYSICAL EDUCATION ACTIVITY, 1 hour credit

Individual and group activities for general physical improvement. Laboratory 2 hours.

## 1101 BEGINNING SWIMMING, 1 hour credit

Introduction to swimming which will equip the individual with basic water safety skills and strokes. Provides opportunity for studying Beginner and Advanced Beginner Red Cross courses. Laboratory 2 hours.

## 1111 INTERMEDIATE SWIMMING, 1 hour credit

A variety of swimming skills are introduced and practiced to provide the student with the opportunity to learn the elements of good swimming. Emphasis on strokes and safety procedures in Intermediate Red Cross courses. Laboratory 2 hours. Prerequisite: Beginning Swimming or equivalent.

## 1121 ADVANCED SWIMMING, 1 hour credit

Student will practice the series of basic strokes with the emphasis on coordination of the whole stroke in order to swim effectively with ease, endurance, and versatility in the water. Advanced forms of safety and an introduction to swimming rescues are provided. Laboratory 2 hours. Prerequisite: Intermediate Swimming or equivalent.

## 1131 LIFEGUARD TRAINING, 1 hour credit

A comprehensive lifesaving course covering personal safety and self rescue skills, swimming skills for lifesaving, approaches, carries, defenses, releases, search and rescue, cardiopulmonary resuscitation and small craft safety. Laboratory 2 hours. Prerequisite: Advanced Swimming or equivalent.

## 1141 WATER SAFETY INSTRUCTION (WSI), 1 hour credit

Two part course with the first part consisting of analysis of basic swimming strokes, additional strokes, related aquatic skills plus diving fundamentals. The second part consists of practical teaching in the Red Cross program from beginner to Advanced Life Saving level with cardiopulmonary resuscitation (CPR). Laboratory 2 hours. Prerequisite: Current Senior Life Saving Certificate.

## 1151 SKIN AND SCUBA DIVING, 1 hour credit

Practice involving skills in safe and effective use of face mask, snorkel, fins and other scuba equipment. Laboratory 2 hours. Prerequisite: Advanced Swimming or equivalent.

## 1152 SKIN AND SCUBA DIVING, 2 hours credit

Practice involving skills in safe, effective use of face mask, snorkel, fins and other scuba equipment. Deep water check out and certification. Lecture 1 hour. Laboratory 2 hours. Prerequisite: Advanced Swimming or equivalent.

## 1201 BADMINTON, 1 hour credit

Fundamental techniques of Badminton with instruction in court work of singles and doubles. Laboratory 2 hours.

## 1221 ORIENTEERING, 1 hour credit

Study of basic principles in reading, interpreting, and developing skills to accurately use the map and compass for individual and group enjoyment (hiking, hunting, cross country skiing, etc.) and to develop knowledge and competitive techniques for the sport of Orienteering. Laboratory 2 hours.

## 1251 BEGINNING SAILING, 1 hour credit

Fundamental skills and basic knowledge for sailing small watercraft. Laboratory 2 hours. Prerequisite: Must be able to swim.

## 1261 CANOEING AND CAMPING, 1 hour credit

Fundamentals skills and basic knowledge for canoeing lakes and streams; preparation and use of equipment for outdoor camping. Weekend field trip. Laboratory 2 hours. Prerequisite: Must be able to swim.

## 1281 FLY AND BAIT CASTING, 1 hour credit

Development of skills in executing different methods of casting. Fundamentals used in selecting of rod, reel, and lures. Safety and strategy for fisherman. Laboratory 2 hours.

## 1291 CYCLING AND HIKING, 1 hour credit

Organizing and directing individual and group Cycling and Hiking sessions. Simple techniques in the repair and maintenance of bicycles. Proper techniques in safety and skills that will add to the individual's enjoyment and development of appreciation for outdoor recreation. Laboratory 2 hours.

2001 ELEMENTARY GOLF, 1 hour credit
Fundamentals and techniques of beginning golf. Laboratory 2 hours.
2011 ELEMENTARY BOWLING, 1 hour credit
Teaching of fundamentals and techniques of bowling. Laboratory 2 hours.
2021 ADVANCED BOWLING, 1 hour credit
Advanced into teams and league bowling. Laboratory 2 hours. Prerequisite: PE 2011.
2031 ELEMENTARY TENNIS, 1 hour credit
Fundamentals and techniques of tennis. Laboratory 2 hours.

## 2032 INDIVIDUAL SPORTS, 2 hours credit

Individual sports and recreational activities for general physical improvement. Laboratory 4 hours.

## 2041 INTERMEDIATE TENNIS, 1 hour credit

Review of fundamentals and additional instruction of strokes, court work in singles and doubles. Laboratory 2 hours. Prerequisite: Beginning Tennis or equivalent.

## 2061 RIFLERY, 1 hour credit

Safety and marksmanship. Laboratory 2 hours.

## 2062 PHYSICAL EDUCATION ACTIVITY, 2 hours credit

Individual and group activities for general physical improvement. Laboratory 4 hours.

## 2101 ARCHERY, 1 hour credit

Men and/or women basic fundamentals of shooting a bow and arrow, terminology, correct selection and care of equipment, safety procedures and etiquette. Laboratory 2 hours.

## 2121 SELF-DEFENSE, 1 hour credit

Study and development of skills and fundamental knowledge in the art of self-defense through scientific principles of body control over opposing forces. Laboratory 2 hours.

## 2161 INTRAMURAL SPORTS, 1 hour credit

Participation in the intramural activities of the University with approval of the Intramural Director. (Maximum credit one hour toward general education requirements.)

## 2181 RECREATION ACTIVITIES, 1 hour credit

Participation in outdoor and indoor recreational activities. Laboratory 2 hours. Boxerobics, country-western line dance, fitness for life, hiking, racquetball, sailing, shooting sports, Tai Chi, Tomiki Aikido, walking, jogging, weight training, windsurfing, Yoga.

## INTERCOLLEGIATE SPORTS COURSES (ATH)

## 2201 BASEBALL, 1 hour credit <br> Participation in Intercollegiate Sports. Maximum credit 1 hour toward General Education.

## 2211 BASKETBALL, 1 hour credit

Participation in Intercollegiate Sports. Maximum credit 1 hour toward General Education.

## 2231 GOLF, 1 hour credit

Participation in Intercollegiate Sports. Maximum credit 1 hour toward General Education.

## 2241 TRACK AND FIELD, 1 hour credit <br> Participation in Intercollegiate Sports. Maximum credit 1 hour toward General Education.

## 2251 TENNIS, 1 hour credit

Participation in Intercollegiate Sports. Maximum credit 1 hour toward General Education.

## 2261 SOFTBALL, 1 hour credit

Participation in Intercollegiate Sports. Maximum credit 1 hour toward General Education.

## 2271 VOLLEYBALL, 1 hour credit

Participation in Intercollegiate Sports. Maximum credit 1 hour toward General Education.

## SAFETY COURSES (SFTY)

## 1001 DEFENSIVE DRIVING, 1 hour credit

Instruction for the improvement of driver skills to avoid traffic related accidents. Lecture 1 hour.
3613* DRUGS AND SOCIETY, 3 hours credit
A study of substance abuse emphasizing the adverse effects on human life, health, traffic safety, and daily living.

## 3723 SAFETY EDUCATION, 3 hours credit

Designed to prepare teachers in methods and materials related to safety problems and accident prevention in the home, school, recreation, work and highways. Lecture 3 hours.

Persons enrolling in the following Safety courses must have a valid driver's license.

## 3823 DRIVER AND TRAFFIC SAFETY I, 3 hours credit

Designed to prepare teachers in problems, techniques and methods of teaching driver and traffic safety in the secondary school. Primary emphasis on teaching the classroom phase of Driver Education related to
instruction and evaluation. Laboratory time for practicing on-the-street driving. Lecture 2 hours, laboratory 2 hours.

## 4923 DRIVER AND TRAFFIC SAFETY II, 3 hours credit

Designed to improve skills and techniques for teachers and supervisors in the field of driver education. Includes the study of the latest developments in materials, equipment and research. Laboratory time in teaching beginning driver in dual-control car. Lecture 2 hours, laboratory 2 hours. Prerequisite: SFTY 3823.

## 4943 ORGANIZATION AND ADMINISTRATION OF DRIVER EDUCATION, 3 hours credit

Designed for planning of curriculum, organization and the administration of Driver and Safety Education programs with emphasis on the evaluation of current programs and factors involved in program supervision and administration such as: qualifications, credit, state and national records, reimbursement, adult programs and scheduling. Lecture 3 hours. Prerequisite: SFTY 4923.

4953 METHODS AND MATERIALS OF TEACHING DRIVER EDUCATION, 3 hours credit
A survey of driver education content and materials including classroom, simulation, range and in-car instruction. Effective teaching strategies will be presented as to organization and evaluation of driver education programs. Lecture: 3 hours. Prerequisites: SFTY 3823, SFTY 4923.

## 4981-4 SPECIAL STUDIES, 1-4 hours credit.

Directed individual study in selected areas of Safety, Traffic and Driver Education through research, readings, reports and/or on-the-job internship. May be repeated to a total of 8 hours. Prerequisite: Junior standing and departmental permission.

[^1]
## DEPARTMENT OF

PSYCHOLOGY AND HUMAN ECOLOGY

CHAIR - Lawrence Weinstein, Professor Professors: Dzindolet, Pazoureck, Weinstein Associate Professors: Alexander, Batka, Geiger, Jerez

Assistant Professors: Laverghetta, Powers
Instructor: Perry
The Department of Psychology and Human Ecology offers programs leading to the Bachelor of Science degree with majors in Psychology and Human Ecology. Refer to the Graduate Catalog for information relating to the Psychology specialty in the Master of Science in Behavioral Sciences degree program.

## BACHELOR OF SCIENCE DEGREE MAJOR IN HUMAN ECOLOGY (390)

Human Ecology is the study of humans as social, physical, biological beings in interaction with each other, their community, and with their natural constructed environments. Study of the family ecosystems is the core of Human Ecology, designed to prepare individuals, as members of a family, for productivity for self and society through education in wise decision making and effective use of resources to optimize human development and the quality of life and the environment. The University's plan of study in Human Ecology is designed to educate students for success in occupational careers that involve working with individuals and families in meeting their developmental, behavioral, relational, financial and consumption needs.
I. GENERAL EDUCATION REQUIREMENTS ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... 36 hours
Required Core Courses ..... 18 hoursCRM 3603, CRM 3623, CRM 4633, FAMS 1123, FAMS 1163, FNS 1343
Concentration ..... 18 hours
Human Ecology majors must complete one of the following concentrations:
HUMAN ECOLOGY (18 hours)
To be selected from approved offerings within the department.
FAMILY SCIENCE (18 hours)FAMS 3143, FAMS 4123, FAMS 4133, FAMS 4153 and six hours to be selected from thefollowing: FNS 3313, FAMS 4143, FAMS 4163, FAMS 4173, FAMS 4783, FAMS 4801-4*, FAMS4881-4 or other approved electives from departmental offerings.

* Second semester juniors must make formal application for their Field Experience with the Human Ecology Office.
III. MINOR ..... 18 hours
Required Courses: FAMS 1123 and FAMS 1163. The remaining 12 credits may be selected from any course with the FAMS prefix or students may choose 18 credits from another discipline.
IV. ELECTIVES SELECTED TO SUPPORT CAREER GOALS AND COMPLETE 128 HOURS FOR GRADUATION.


## CONSUMER RESOURCE MANAGEMENT COURSES (CRM)

## 3603* CONSUMER ECONOMICS, 3 hours credit

Use of economic theories and principles to understand the management of consumer resources, the process of rational decision making and the importance of citizen participation in the economic process. Lecture 3 hours. Prerequisite: Junior standing or departmental permission.

## 3623* CONSUMER RESOURCE MANAGEMENT, 3 hours credit

Concepts and procedures of resource management with application to the problems and responsibilities of individuals and families. Emphasis given to decision-making, resource conservation, and computer application to resource management. Prerequisite: Junior standing or departmental permission.

## 4033* PROFESSIONAL CAREER DEVELOPMENT, 3 hours credit

Relationship of appearance and dress in creating a professional image for men and women. Effective resume design; interviewing skills; executive etiquette; career research and advancement strategies. Prerequisite: Junior standing or departmental permission.

## 4633* WORK AND SOCIETY, 3 hours credit

Comprehensive examination of linkages between personal, family and work life. A contemporary analysis of laws, attitudes, and demographic trends that form the reciprocal relationship between work and society. Prerequisite: Junior standing or department permission. Lecture 3 hours.

## CRM, FAMS, FNS

## 4781-3 WORKSHOP, $1-3$ hours credit

Workshop designed to give intensive emphasis to a specific area. May be repeated with a different topic for a total of 6 hours. Prerequisite: Departmental approval.

## FAMILY SCIENCE COURSES (FAMS)

## 1123* FAMILY RELATIONS, 3 hours credit

An examination of research, issues, challenges, opportunities, and trends relating to family interaction and decision making over the life-span

## 1163* HUMAN ECOLOGY, 3 hours credit

Basic ecological principles and concepts related to health will be presented. Humanity's place within the environment will be surveyed including the interrelationships of geographic, political, economics, social, psychological and other factors.

## 3143* PARENTHOOD EDUCATION, 3 hours credit

Education as to the decisions, responsibilities and social issues related to parent-child relationships. Understanding the role of the parent with emphasis on communication, creativity and discipline. Lecture 3 hours. Prerequisite: FAMS 1123 , Junior standing or departmental permission.

## 4123* MARRIAGE, 3 hours credit

Identification and analysis of stressors in contemporary marriages. Strategies for enrichment will be emphasized. Lecture 3 hours. Prerequisite: FAMS 1123, Junior standing or departmental permission. .

## 4133* MIDDLE AND LATER ADULT YEARS, 3 hours credit

Emphasis on development processes and generational relationships. Individuals in middle and later stages of the family life cycle will be studied. Changing family composition, role transitions, support systems and potentials for enhancement will also be investigated. Lecture 3 hours. Prerequisite: FAMS 1123 or PSY 1113 or SOCI 1113.

## 4143* CRISIS MANAGEMENT AND RESOURCES, 3 hours credit

Examination of crisis and management theories and strategies used to help individuals and families deal productively with crisis producing situations. Identification and mobilization of pertinent personal, family, and community resources. Prerequisite: Junior standing or department approval.

## 4153* HUMAN SEXUALITY, 3 hours credit

The investigation of human sexuality against a background of changing sexual mores for a physiological, psychological and sociological perspective. Exploration of current issues and implications for future trends in human interaction. Special emphasis on the development of healthy interpersonal relationships. Prerequisites: FAMS 1123, PSY 1113 or SOCI 1113, Junior standing or departmental approval.

## 4163 HEALTHY AGING, 3 hours credit

Emphasis on demographic changes due to longevity; differences between aging and illness; and effects of aging that may be reversible. Prerequisite: FAMS 1123, Junior standing, or departmental approval.

## 4173 FUNCTIONAL FAMILY SYSTEMS, 3 hours credit

Emphasizes the family unit as a communicational, instructional, and interactional system. Prerequisite: FAMS 1123, Junior standing, or departmental approval.

## 4801-4 FIELD EXPERIENCE IN FAMILY SCIENCE, 1 - 4 hours credit

Supervised study and/or work experience in the field relating to the student's special interest or area of concentration. Prerequisite: Departmental approval.

## 4881-4 INDEPENDENT STUDY IN FAMILY SCIENCE, 1 -4 hours credit

Directed research and intensive study on selected problems or special topics. No more than four credit hours of independent study may be counted toward the requirements for a major in the department. Prerequisite: Departmental approval.

## 4901-3 SEMINAR IN FAMILY SCIENCE, 1 - 3 hours credit

A course designed to meet the special needs within the department. Prerequisite: Departmental approval. May be repeated with a different topic for a total of 6 hours.

## FOOD AND NUTRITION SCIENCES COURSES (FNS)

## 1343* BASIC NUTRITION, 3 hours credit

Introduction to the science of human nutrition through an analysis of the nutrient content of food and the relationship of nutrients to health and disease. Lecture 3 hours.

## 3313 NUTRITION IN THE LIFECYCLE, 3 hours credit

Study includes the physiological, biochemical, and sociological factors affecting nutrient requirements over the life span; emphasis on practical application of nutrition concepts and appropriate food selections to meet nutrient needs. Lecture 3 hours. Prerequisite: FNS 1343.

[^2]
## BACHELOR OF SCIENCE DEGREE MAJOR IN PSYCHOLOGY (165)

Psychology is the scientific study of behavior. Through courses in psychology, students will learn principles which govern human behavior. The courses offered reflect the diversity in psychology and meet the educational objectives of at least three groups of students: (1) Those who seek a general survey course in the field of psychology or those who wish to study a program of psychology in depth at the undergraduate level but do not contemplate entrance into psychology as a profession, (2) those who wish to enter psychology as a profession immediately after the Bachelor's Degree, and (3) those who plan to attend graduate school and then enter psychology as a profession.
I. GENERAL EDUCATION REQUIREMENTS ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... 42 hours
Required Courses 27 hours
PSY 1113, PSY 2113, PSY 3353, PSY 3413, PSY 3423, PSY 4363, PSY 4393, PSY 4423, PSY 4433
Electives 15 hoursSelected from the following list with a minimum of 9 hours having aPsychology prefix of 3000 or above. PSY 2223, PSY 2323, PSY 3313,PSY 3333, PSY 3383, PSY 4313, and PSY 4443
III. MINOR 18 hours
MAJOR IN PSYCHOLOGY/MINOR IN SPECIAL EDUCATION
A major in Psychology with a minor in Special Education provides an opportunity for individuals tobecome familiar with children and youth with special needs. The minor in Special Education does notprepare students for state teaching licensure in the public schools.
I. GENERAL EDUCATION REQUIREMENTS ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... 39 hours
Required Courses ..... 27 hours
PSY 1113, PSY 2113, PSY 3353, PSY 3413, PSY 3423, PSY 4363, PSY 4393, PSY 4423, PSY 4433
Electives 15 hours Selected from Psychology course offerings with a minimum of 9 hourshaving a prefix of 3000 or above; PSY 2223, PSY 2323, PSY 3313, PSY 3333, PSY3383, PSY 4313, PSY 4443
III. MINOR ..... 18 hours
Minimum of 18 hours: SPED 3203, SPED 3263, SPED 3223, SPED 3243 , SPED 4413, SPED 4453

## PSYCHOLOGY COURSES (PSY)

## 1113* GENERAL PSYCHOLOGY, 3 hours credit

A study of the basic facts and principles of behavior. Lecture 3 hours.

## 2001-3* SELECTED TOPICS IN PSYCHOLOGY, $1-3$ hours credit

Contemporary and historical concerns of Psychology are explored. A different topic may be presented each semester. Lecture 3 hours. Prerequisite: PSY 1113.

## 2113* HISTORY OF PSYCHOLOGY, 3 hours credit

A study of modern psychology as a science with emphasis on past and present schools of psychological thought. Lecture 3 hours. Prerequisite: PSY 1113.

## 2223* APPLIED PSYCHOLOGY, 3 hours credit

Psychological principles in relation to problems of Business, Industry, Education, Mental Health, or other human enterprises. Lecture 3 hours. Prerequisite: PSY 1113.

## 2323* SENSATION AND PERCEPTION, 3 hours credit

A survey of the biological properties of sensory systems and major phenomena in sensation and perception (e.g., adaptation, brightness, color and binocular vision, audition, taste, touch, imagery, individual differences, time and motion, attention and theories of psychophysical judgment including STD and classical). Prerequisite: PSY 1113.

## 2373* INTRODUCTION TO HEALTH PSYCHOLOGY, 3 hours credit

Comprehensive inquiry focusing on the branch of psychology that concerns individual behaviors and lifestyles affecting a person's physical health. Professional issues, gender and cultural issues, within an application orientation include: enhancement of health, the prevention and treatment of disease, the identification of health risk factors, the improvement of the health care system and the shaping of public opinion with regard to health. Lecture 3 hours. Prerequisite: PSY 1113.

## 3313* COGNITIVE PSYCHOLOGY, 3 hours credit

Examines cognitions involving language, thinking, problem solving, memory, intelligence, and categorization. Prerequisite: PSY 1113.

## 3333 COUNSELING AND CLINICAL PSYCHOLOGY, 3 hours credit

A description of the professional life of a counseling or clinical psychologist including the history, description, duties, ethics, skills, and training required. Prerequisite: PSY 1113.

## 3353* LIFESPAN HUMAN GROWTH AND DEVELOPMENT, 3 hours credit

Survey of the psychological changes across the lifespan. Cognitive, social, emotional, and physical changes from birth to death will be examined. Prerequisite: PSY 1113.

## 3383* SOCIAL PSYCHOLOGY, 3 hours credit

The study of human behavior as affected by social stimuli. Prerequisite: PSY 1113.

## 3413* PSYCHOLOGY OF LEARNING, 3 hours credit

Investigations into the processes of learning in humans and animals. Emphasis is given to behavioral and cognitive approaches. Lecture 3 hours. Prerequisite: PSY 1113.

## 3423 APPLIED QUANTITATIVE METHODS, 3 hours credit

A strong emphasis will be placed on inferential procedures used in published articles in psychological journals. Topics include correlational testing, linear regression, simple and factorial ANOVAs, tests for outliers, normalcy, randomness, heterogeneity of variance, and post-hoc analysis. Lecture 3 hours. Prerequisites: PSY 1113 and MATH 1513.

## 4313 PSYCHOLOGICAL TESTING, 3 hours credit

Principles, practices and procedures of psychological testing are examined. Attention is given to construction, validation and interpretation of measuring instruments in the fields of personality, intelligence, aptitudes and attitudes. Lecture 3 hours. Prerequisites: PSY 1113 and PSY 3423.

## 4331-3 SEMINAR IN PSYCHOLOGY, 1 -3 hours credit

Specific problems or issues of concern to Psychology are given in depth exploration and analysis. A different topic may be presented each semester. (May be repeated for a total of six hours credit.) Lecture 3 hours. Prerequisites: Senior standing and departmental approval.

## 4363* ABNORMAL PSYCHOLOGY, 3 hours credit

The study of various abnormalities as described in DSM. Prerequisite: PSY 1113.

## 4393* PERSONALITY, 3 hours credit

Factors determining and affecting personality, its development and assessment. Lecture 3 hours. Prerequisite: PSY 1113.

## 4423 EXPERIMENTAL PSYCHOLOGY, 3 hours credit

Studies in the major designs, methods employed and problems in conducting experiments in psychological research. Lecture 3 hours. Prerequisites: PSY 1113 and PSY 3423.

## 4433 PSYCHOLOGICAL RESEARCH, 3 credit hours

Students will design and conduct a psychological research project of sufficient quality for conference presentation. Material covered will include APA format research ethics, data analysis and conference presentation preparation. Lecture 3 hours. Prerequisites: PSY 1113 and PSY 4423.

## 4443* BIOPSYCHOLOGY, 3 hours credit

Explains behavior in terms of the physiological events inside the body with emphasis on vision, audition, psychoactive drugs, eating, sex, and sleep. Lecture 3 hours. Prerequisite: PSY 1113.

[^3]
## SCHOOL OF LIBERAL ARTS

Dean<br>Von Underwood

DEPARTMENT OF ART
Edna McMillan, Chair

## DEPARTMENT OF ENGLISH AND FOREIGN LANGUAGES Margery Kingsley, Chair

DEPARTMENT OF COMMUNICATION<br>Tony Allison, Chair

DEPARTMENT OF<br>CRIMINAL JUSTICE AND SOCIOLOGY<br>Robert Bausch, Interim Chair

DEPARTMENT OF HISTORY AND GOVERNMENT Richard Voeltz, Chair

DEPARTMENT OF MUSIC
John Moots, Interim Chair

DEPARTMENT OF THEATRE ARTS
Scott Richard Klein, Chair
The School of Liberal Arts offers associate and baccalaureate programs as well as graduate courses in the fine arts, humanities, and social sciences. Courses in these areas are also offered in support of general education. An associate degree program is offered in criminal justice. Programs leading to baccalaureate degrees are offered in art, communications, English, history, Romance languages, music, criminal justice, sociology, political science, and theatre arts.

Liberal Arts students and faculty engage in scholarship and produce concerts, recitals, theatre productions, art exhibits, lectures, symposia, camps, and public forums which enrich the intellectual and cultural lives of our students and the citizens residing in our service area.

## DEPARTMENT OF

## $\mathrm{A}_{\text {RT }}$

CHAIR - Edna McMillan, Associate Professor
Professors: Liontas-Warren, B. Warren
Assistant Professors: Linehan
The mission of the Department of Art is to support and enhance the University's educational process by offering learning opportunities in art to the people of Southwest Oklahoma through appropriate degree programs and concomitant service curricula and activities.

The Department of Art offers a program leading to a Bachelor of Arts Degree with a major in art and a program leading to a Bachelor of Fine Arts Degree.

## BACHELOR OF ARTS DEGREE <br> MAJOR IN ART (110)

The mission of the Bachelor of Arts degree program in Art is to prepare students for entry into a number of art related professions or endeavors by completing a broad, yet organized, curriculum in both art history and studio related courses.
I. GENERAL EDUCATION REQUIREMENTS ..... 50 hoursGeneral Education requirements are found on the red striped pages.
II. MAJOR ..... 48 hours
ART 1113, ART 1123, ART 1213, ART 1223, ART 1231, ART 2243, ART 2313, ART 2413, ART 2513, ART 2613, ART 2623, ART 3133 or ART 4143, ART 4633, ART 4991 Electives in Advanced Studio Courses ..... 10 hours
III. MINOR ..... 18 hours
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION. B.A. students must have 80 hours of Liberal Arts and Science courses.

## BACHELOR OF FINE ARTS IN STUDIO ARTS DEGREE (111)

The mission of the Bachelor of Fine Arts degree program in Art is to prepare students for entry into graduate school or a number of art related professions or endeavors by providing learning opportunities that lead to the completion of a specialized curriculum in one of several studio areas, Painting, Printmaking, Sculpture or Graphic Design.

## Students seeking admission to the B.F.A. Program must pass an entrance examination.

I. GENERAL EDUCATION REQUIREMENTS . . . . . . . . . . . . . . . . . . . . . . . . . . . 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... 70 hours
ART 1113, ART 1123, ART 1213, ART 1223, ART 1231, ART 2243, ART 2313,ART 2413, ART 2513, ART 2613, ART 2623, ART 3133, ART 4143,ART 4633 (6 hours), ART 4991
Advanced Studio Concentration 18 hours
Electives in Advanced Studio Courses ..... 8 hours
III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.
B.F.A. students must have 40 hours of Liberal Arts and Sciences Courses.

## ART COURSES (ART)

## 1013* ART APPRECIATION, 3 hours credit

An introduction to various aspects of the visual arts with illustrated lectures and studio demonstrations. Lecture 3 hours.

1023* FUNDAMENTALS OF ART, 3 hours credit
An introduction to art through studio experience for non-majors. Studio 6 hours.

## 1031-3 WORKSHOP, $1-3$ hours credit

A concentrated course of specific exploration at the introductory level of various art forms, designed to provide intensive experience in studio projects. May be repeated for credit under different subtitle. No more than 4 hours of ART 1031-3 may be credited toward a major/minor in Art. Studio 2-6 hours.

## 1113* DRAWING I, 3 hours credit

Introduction to the basic principles, techniques and media of drawing/perception, Studio 6 hours.

## 1123 DRAWING II, 3 hours credit

Drawing experiences that coordinate drawing skills with perception and creativity. Studio 6 hours. Prerequisite: ART 1113.

## 1213* DESIGN I, 3 hours credit

An introductory class concentrating on two and three dimensional forms which emphasizes design elements and their organizational principles. Studio 6 hours.

## 1223 DESIGN II, 3 hours credit

Application and analysis of three-dimensional elements and principles of design. Studio 6 hours. Prerequisite: ART 1213.

## 1231 COMPUTER-STUDIO LAB, 1 hour credit

An introduction to computer graphics and appropriate software for use in foundation studio art courses. For Art majors only. Prerequisite: concurrent enrollment in ART 1113 and/or ART 1213 or permission of department chairman. Studio 2 hours.

## 2243* COLOR, 3 hours credit

Exploration and analysis of color. Studio 6 hours.

## 2253 COMPUTER GRAPHIC DESIGN, 3 hours credit

An introduction to the processes of creatively translating concepts from words to effective visual communication through graphic design, layout, and technical illustration. Studio 6 hours. Prerequisite ART 1213.

## 2313 PAINTING, 3 hours credit

Painting courses exploring the principles, techniques, media and creative potential of painting. Studio 6 hours. May be repeated for credit under a different subtitle.

2413 PRINTMAKING, 3 hours credit
An introduction to various basic printmaking processes: collagraphs, monoprints, intaglio, serigraphy, lithography, relief printing. Studio 6 hours. Prerequisite: ART 1113.

## 2513 SCULPTURE, 3 hours credit

A beginning class that emphasizes sculptural form and aesthetics through various media and techniques. Studio 6 hours. Prerequisite: ART 1213.

## 2613* HISTORY OF ART I, 3 hours credit

A survey of the painting, sculpture and architecture from prehistoric times through the Gothic period. Lecture 3 hours.

## 2623* HISTORY OF ART II, 3 hours credit

A survey of the painting, sculpture and architecture from the Renaissance through the 20th Century. Lecture 3 hours.

## 2733 ILLUSTRATION, 3 hours credit

Introduction to historic and contemporary illustration and consideration of a wide range of illustrative styles. Required experiments with media and consideration of alternate ways of illustrating a message through conceptual and compositional variations. Studio 6 hours. Prerequisites: ART 1113 and ART 1213.

## 2743 TYPOGRAPHY, 3 hours credit

An investigation of letter forms and their characteristics and a study of spacing, leading, type selection, layout alternatives, type specification and copy fitting. Preliminary introduction to typography as a communication medium. An understanding to typographic terminology and measuring systems while developing hand skills and introducing computer technology. Studio 6 hours. Prerequisites: ART 1113, ART 1123 and ART 1213.

## 2813 BEGINNING CERAMICS, 3 hours credit

Introduction to ceramic techniques, with focus on exploration, ideas, and the aesthetics of form. Studio 6 hours.

## 3133 FIGURE DRAWING, 3 hours credit

A studio course emphasizing drawing concepts and techniques. Studio 6 hours. Prerequisite: ART 1113.

## 3213 GRAPHIC DESIGN, 3 hours credit

Exploration of basic design principles-line, form and color, as visual communication. Problem solving, generation of ideas, development of concepts and the integration of word and image. Technical and presentation skills. Studio 6 hours. Prerequisite: ART 2253.

## 3713 ART FOR ELEMENTARY TEACHERS, 3 hours credit

Lecture and laboratory experience in two and three dimensional media designed for the understanding and application of art as an element of the elementary curriculum. Lecture/studio 3 hours.

## 3723 PUBLIC SCHOOL ART, 3 hours credit

Elementary and Secondary theory in two and three dimensional media designed for the application and understanding of art as an element of the school curriculum with lecture laboratory and field experience.
Teacher Certification students must be admitted to teacher education prior to enrollment. Studio 6 hours.

## 3743 ADVANCED COMPUTER GRAPHICS AND IMAGE ENHANCEMENT, 3 hours credit

Use of computer software to capture, create and alter electronic images for use in graphic design and illustration applications with an emphasis on concept and thematic development. Skillful production of portfolio pieces via learned software. Studio 6 hours. Prerequisites: ART 2733, ART 3213, Graphic Design majors/consent of instructor.

## 3753 LAYOUT/PRODUCTION, 3 hours credit

Use of computer and traditional methods to enhance production skills and solution of design projects from concept to the comprehensive. Evaluation and design of symbols and logos and their various applications, leading to an understanding of system design. Introduction to graphic design production and the preparation of art for reproduction. Studio 6 hours. Prerequisites: ART 2253, ART 2743, and ART 3213.

## 3833 CRAFTS, 3 hours credit

A studio course that relates material to form and function, with an emphasis on one of several materials: weaving, beadwork, textiles, etc. May be repeated under a different subtitle. No more than 6 hours may be counted toward a major in Art. Studio 6 hours.

## 4143 ADVANCED DRAWING, 3 hours credit

Advanced studio courses exploring the principles, techniques, media and creative potential of drawing. Studio 6 hours. May be repeated for credit under a different subtitle. Prerequisite: ART 1113.

## 4213 ADVANCED GRAPHIC DESIGN, 3 hours credit

Design problems with special attention to sinage, exhibition design, packaging, display, and point of purchase. Use of model-building tools and study of structure and form to introduce the student to problemsolving and finishing techniques. Development of concepts into models. Studio 6 hours. Prerequisites: Art Foundation and ART 3213 and ART 3743.

## 4323 ADVANCED PAINTING, 3 hours credit

Advanced studio courses in a variety of painting techniques which may include incursions of other media such as photography and print. May be repeated for credit under a different subtitle. Studio 6 hours. Prerequisite: ART 2313.

## 4423 ADVANCED PRINTMAKING, 3 hours credit

Advanced studio course exploring the principles, techniques, media and creative potential of printmaking. Areas of concentration include etching, lithography, serigraphy, block printing, collagraphs. Studio 6 hours. May be repeated for credit under a different subtitle. Prerequisite: ART 2413.

## 4523 ADVANCED SCULPTURE, 3 hours credit

Advanced studio courses emphasizing personal exploration and involvement with sculptural form and techniques. May be repeated for credit under a different subtitle. Studio 6 hours. Prerequisite: ART 2513.

## 4633* HISTORY OF ART SEMINAR, 3 hours credit

Advanced Art History courses with an emphasis on one or more of the following areas: Contemporary Art, American Art, Oriental Art, Principles of Art History. May be repeated for credit under a different subtitle. Lecture 3 hours. Prerequisites. ENGL 1213 and 3 hours of History.

## 4713 HISTORY OF GRAPHIC DESIGN, 3 hours credit

Evolution of graphic communication from prehistoric times to the present. Investigation of the origins of printing and typography in Europe leading to the design of the printed page, the impact of industrial technology upon visual communication and the study of the growth and development of modern graphic design. Lecture 3 hours. Prerequisites: ART 3213, ART 4213, Graphic Design majors or consent of instructor.

## 4733 ART PORTFOLIO CAPSTONE, 3 hours credit

Final preparation of a professional portfolio, culminating in an extensive design project and the design, organization and production of an exhibition of work. Professional study on setting fees, writing contracts, working with an agent and other business practices. Studio 6 hours. Prerequisites: ART 3213, ART 3743, ART 4213, ART 4713.

## 4823 ADVANCED CERAMICS, 3 hours credit

Advanced studio courses in the application of clay techniques emphasizing the aesthetics of form. Studio 6 hours. Prerequisite: ART 2813. May be repeated for credit under a different subtitle.

## 4911-4 WORKSHOP, 1-4 hours credit

A concentrated course of specific exploration of various art forms, designed to provide intensive experience in studio projects. May be repeated for credit under different subtitle. No more than 6 hours of ART 4911-4 may be credited toward a major in Art. Studio 2-8 hours.

## 4921-3* INDEPENDENT STUDY, 1 -3 hours credit

Independent study and guided research in a selected area of Art. May be repeated for credit. Prerequisite: Approval by the department chairman.

## 4991 SENIOR ART EXHIBITION, 1 hour credit

A capstone course that emphasizes the development and documentation of professional credentials and culminates in a final exhibition of art. Lecture 1 hour.

## 4933 SENIOR ART STUDIO, 3 hours credit

Senior level art experience in a major studio area. May be repeated for credit. Studio 6 hours, as assigned by department chairman. Prerequisites: Senior standing in Art and permission of the department chairman.

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# DEPARTMENT OF 

## COMMUNICATION

CHAIR - Tony Allison, Associate Professor
Associate Professors: Heflin, Hernandez, Jenkins, Price
Assistant Professors: Adams, Keller, Walton
Instructors: Ferrell, Norman

The Department of Communication offers a program leading to a Bachelor of Arts degree with a major in Communications.

The Bachelor of Arts in Communications attempts to balance theory and performance-based skills in four areas of concentration: speech communication, radio/television, public relations and organizational communication, and journalism. As the four areas demonstrate, the disciplinary perspective of the Communications program tends to be centered in all areas of oral and mass communication. Major activities of the department include: CUTV, KCCU, broadcast contests, The Cameron Collegian (weekly campus newspaper) Speech and Debate Team, Summer Speech-DebateBroadcast Camp, gifted and talented workshops for southwest Oklahoma and north Texas public schools, and high school Speech Demonstration Day. Four student organizations in the department are: Broadcast Club, Lambda Pi Eta, Pi Kappa Delta and Society for Professional Journalism. (See Communication Department's web pages www.cameron.edu).

## BACHELOR OF ARTS DEGREE MAJOR IN COMMUNICATIONS (170)

I. GENERAL EDUCATION REQUIREMENT 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... 42 hoursAll Communications majors are required to keep a portfolio of their work.(See advisor for details.)
Required Core Courses 12 hoursRTV 1013, JOUR 2113, COMM 3393, COMM 3383 or PBRL 3823
Concentration ..... 30 hoursMajors must choose one or more of the following concentrations: SpeechCommunication, Radio/Television, Journalism, Public Relations andOrganizational Communication.

## Speech Communication

COMM 1133, COMM 2313, COMM 3313, COMM 3633, COMM 3713, COMM 4623 Electives ( 12 hours) may be chosen from the following courses or from courses in the areas of Radio/Television; Journalism; and Public Relations and Organizational Communication COMM 2143, COMM 2533, COMM 3103, COMM 3113, COMM 3121-4, COMM 3353, COMM 3643, COMM 3833, COMM 3991-3, COMM 4773, COMM 4991-3

## Radio/Television

RTV 2213, RTV 2313, RTV 3123, RTV 3323, RTV 3513, RTV 3911-2 (RTV 3911-2 Broadcast Lab 3 hours required)
Electives ( 12 hours) may be chosen from the following courses or from courses in the areas of

Speech Communication; Journalism; and Public Relations \& Organizational Communication RTV 2113, RTV 3223, RTV 3353, RTV 3413, RTV 3931-3, RTV 4133, RTV 4333, RTV 4343, RTV 4923, RTV 4941-3, JOUR 4813
Radio/Television students may select three hours of their electives from the following:
THTR 1203, THTR 3303, THTR 3703

## Journalism

JOUR 3013, JOUR 3043, JOUR 3133, JOUR 3343, JOUR 4133, JOUR 4813
Electives ( 12 hours) may be chosen from the following courses or from courses in the areas of Speech Communication; Radio/Television; and Public Relations \& Organizational Communication JOUR 3233, JOUR 3991-3, JOUR 4213, JOUR 4803, JOUR 4963, JOUR 4981-3, ART 1113 , ART 1213, MM 1133, RTV 3413

Public Relations and Organizational Communication COMM 3383 and PBRL 3823, JOUR 3013, JOUR 3043, COMM 3313, JOUR 3343, COMM 3633 Electives ( 12 hours) may be chosen from any following courses or from courses in the areas of Speech Communication; Radio/Television; and Journalism: RTV 2313, JOUR 3133, JOUR 4213, COMM 2313, COMM 3353, COMM 3833, COMM 4723, PBRL 4823, PBRL 4973
Students in Public Relations and Organizational Communication may select three hours of electives from the following: MGMT 3013, MKTG 3413, MKTG 4433
III. MINOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 18 hours
Students may choose another area of concentration for a minor or may choose a minor in another
discipline.

## IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.

## COMMUNICATIONS COURSES (COMM)

## 1113* FUNDAMENTALS OF SPEECH, 3 hours credit

An introductory course designed to acquaint the student with the basic theory of the art of public speaking and listening. The course provides experience in the composition and delivery of oral presentations in a multi-cultural world. Topics include speech organization, forms of supporting materials, audience analysis, and critical evaluation of speeches. Lecture 3 hours.

## 1133* VOICE AND DICTION, 3 hours credit

A general study of the structure of the vocal mechanism; principles of vocal quality, articulation and pronunciation. Lecture 3 hours.

## 2143* DEBATE, 3 hours credit

Acquaints the student with the complexity of social problems, methods of research, methods of logical analysis and development, construction of briefs, and techniques of refutation; practice in preparation and delivery of sustained arguments. Lecture 3 hours.

## 2313* SMALL GROUP COMMUNICATION, 3 hours credit

A systems based approach to the study of group communication. Social bases of group development and dynamics, including norms, leadership, role structures, conflict, and social climates. Special consideration given to methods of group participation and decision-making. Lecture 3 hours.

## 2533* ORAL INTERPRETATION, 3 hours credit

A beginning study and practice in oral reading of literature, with emphasis on the oral expression of logical and emotional meaning in literature, and the selection of material. Lecture 3 hours.

## 3103* LISTENING, 3 hours credit

A study in the qualities of good listening for personal and organizational communication effectiveness. Performance exercises are used as teaching tools to improve skills. Lecture 3 hours.

## 3113* ARGUMENTATION AND ADVOCACY, 3 hours credit

Nature of argumentative controversy: studies in analysis, evidence, reasoning, and refutation; variables of form and methods. Lecture 3 hours.

## 3121-4 FORENSIC LAB, 1-4 hours credit

Preparation for the participation in intercollegiate forensics and competitive speech activities including debate, discussion, original oratory, extemporaneous and impromptu speaking and oral interpretation. May be repeated. Prerequisite: Departmental permission.

## 3313* ADVANCED BUSINESS AND PROFESSIONAL SPEAKING, 3 hours credit

Emphasis is placed on both theory and application of public speaking, speech criticism, and listening skills in culturally diverse business and professional settings. Students will employ presentation software when delivering a variety of business presentations such as informative, after dinner, persuasive, sales, and team speeches. Lecture 3 hours. Prerequisite: COMM 1113 or departmental permission.

## 3353* TEAM LEADERSHIP PROCESSES, 3 credit hours

Designed to enhance leadership skills and the knowledge of team leadership processes. Topics include the attributes of teams, critical evaluation of information and reasoning processes, creation of effective work climates, and contemporary approaches to leadership. The objective of this course is to learn how to provide leadership in the communication process of work teams. Lecture 3 hours.

## 3383* CORPORATE AND ORGANIZATIONAL COMMUNICATION, 3 credit hours

The theory and function of communication within businesses, government, hospitals, schools, industrial firms, and other organizations with emphasis on concepts and principles needed for effective communication. Lecture 3 hours.

## 3393* INTERPERSONAL COMMUNICATION, 3 credit hours

Improving communication between persons. Discovering and overcoming obstacles in person-to-person communication. Self-awareness of the student's own communication behavior as well as that of others. Projects in listening, speaking and communicating nonverbally. Lecture 3 hours.

## 3633* PERSUASION, 3 hours credit

A study of persuasive communication, including social, psychological, and rhetorical theories of human motivation; audience analysis, methods of adaptation; emotional, logical and rhetorical appeals; analysis of persuasive premises in advertising, social and political campaigns; and special emphasis on ethical responsibilities of the speaker, media, and listener. Lecture 3 hours.

## 3643* POLITICAL COMMUNICATION ANALYSIS, 3 hours credit

Principles and methods of critical analysis will be examined, both historical and contemporary. Students will interpret and evaluate political persuasion. Emphasis will be given to speeches, campaigns, and movements. Lecture 3 hours.

## 3713* INTERCULTURAL COMMUNICATION, 3 hours credit

Students will analyze the basic elements of culture and how those elements interact with the communication process to affect relationships. Lecture 3 hours. Prerequisite: COMM 1113.

## 3833* CONFLICT MANAGEMENT, 3 hours credit

An analysis of conflict situations in personal, professional, and cultural contexts. Role of communication in creating, expressing, and influencing conflict messages and behaviors. Topics include theories of conflict, cooperative processes, dialogue, mediation, interpersonal barriers and power. Lecture 3 hours.

## 3991-3 WORKSHOP, 1-3 hours credit

Workshop designed to give intensive emphasis to a specific area of communication. May be repeated with a different topic for additional credit up to a maximum of six hours. Communication majors can count only three hours of workshop in any communication area toward the communication degree.

## 4623* COMMUNICATION THEORY, 3 hours credit

Advanced survey of major philosophical and theoretical issues in human communication research. Discussion of social scientific and humanistic perspectives, research methods, and theory development. Analysis and critique of contemporary theories in the field. Lecture 3 hours. Prerequisites: 9 hours of communication courses or instructor permission.

## 4723 ORGANIZATIONAL COMMUNICATION INTERNSHIP, 3 credit hours

Supervised work experience in a professional setting which relates to the student's career objectives. The internship will allow practical experience in corporate and organizational communication. May be repeated for a maximum of six hours. Prerequisites: Upper-division standing and department permission.

## 4773 SPEECH/DRAMA METHODS, 3 hours credit

Study of the basis program of speech-drama in the secondary schools; organization of materials, procedures and techniques of instruction. Teacher Certification students must be admitted to teacher education prior to enrollment in this course. Visitation and observation of the teaching situation. Lecture 3 hours. Prerequisites: Department permission and 20 hours communications and theatre arts.

## 4991-3* SPECIAL TOPICS, 1 -3 hours credit

Directed individual or group study of selected topic(s) in communication. The course may be repeated for a total of six hours. Prerequisite: Junior standing.

## JOURNALISM COURSES (JOUR)

## 2113* INTRODUCTION TO JOURNALISM, 3 hours credit

Mass communication and the importance of the media's role in American society. Lecture 3 hours, Corequisite: ENGL 1113 or ENGL 1123.

## 3013* NEWS WRITING, 3 hours credit

A concentrated study of the techniques of obtaining and writing news that focuses on interpretive reporting, in-depth interviewing, reporting and writing. Students will work directly to support The Cameron Collegian. Lecture 3 hours, Prerequisite: JOUR 2113.

## 3043* PHOTOJOURNALISM I, 3 hours credit

The study of the principles and techniques of photography with an emphasis on composition and design. Students will learn and use digital darkroom techniques with the use of scanning software and image editing software. Lecture 3 hours.

## 3133 NEWSPAPER REPORTING, 3 hours credit

A laboratory for students to expand the techniques developed in News Writring (JOUR 3013). Students will work directly to produce The Cameron Collegian. Laboratory 6 hours. Prerequisite: JOUR 3013.

## 3233 ADVANCED NEWSPAPER REPORTING AND DESIGN, 3 credit hours

A laboratory for students to continue to expand the techniques developed in News Writing (JOUR 3013) and Newspaper Reporting (JOUR 3133). Advanced Newspaper Reporting and Design will also provide students the opportunity to directly help design and produce The Cameron Collegian. Laboratory 6 hours. Prerequisites: JOUR 3013, JOUR 3133, JOUR 3043 and JOUR 3343.

## 3343* MEDIA GRAPHICS, 3 hours credit

Explores techniques, processes, and procedures for the publication of print media with an emphasis on the elements of design using the pagination program InDesign and the image editing software Adobe Photoshop. Lecture 3 hours.

## 3991-3 WORKSHOP, 1-3 hours credit

A workshop designed to give intensive emphasis to a specific area of journalism. May be repeated with a different topic for additional credit to a maximum of six hours. Communication majors can count only three hours of workshop in any area of communication toward the communication degree.

## 4133 NEWS EDITING, 3 hours credit

Study of editing and makeup techniques required in newspaper and magazine fields. Lecture 3 hours. Prerequisite: JOUR 2113.

## 4213 PHOTOJOURNALISM II, 3 hours credit

The continued study of the principles of photography with an emphasis on composition and design. Students will continue to employ digital darkroom techniques in coordination with various modes of expression: print, video and online. Lecture 3 hours. Prerequisite: JOUR 3043 or instructor's permission.

## 4803* MASS MEDIA HISTORY, 3 hours credit

European background and development of the colonial press. Emergence of the partisan and penny newspapers. Evolution of personal and independent Journalism. Lecture 3 hours. Prerequisite: 12 hours of Journalism or permission of the instructor.

## 4813 MASS MEDIA LAW, 3 hours credit

The principles by which mass media exercise their public functions and fulfill legal obligations to society. Right to know, truth and fairness, responsibility, libel, privilege, fair comment, privacy, contempt, copyright, and regulation of advertising. Lecture 3 hours. Prerequisite: JOUR 2113 and Junior standing.

## 4963 JOURNALISM INTERNSHIP, 3 hours credit

Field experience in Journalism under close supervision of employer and professor. Lecture 3 hours. Prerequisite: 12 hours of Journalism or permission of the instructor.

## 4981-3* SPECIAL TOPICS, $1-3$ hours credit

Directed individual or group study of selected topic(s) in journalism. The course may be repeated for additional credit with departmental permission. May be repeated for a total of 6 hours. Prerequisite: Junior standing.

## PUBLIC RELATIONS COURSES (PBRL)

## 3823* PRINCIPLES OF PUBLIC RELATIONS, 3 hours credit

Study of current concepts in public relations as a management function in business, industry, government, and education. Practical work in producing public relations tools. Lecture 3 hours. Prerequisite: Junior standing. Lecture 3 hours.

## 4823 CASE STUDIES IN PUBLIC RELATIONS, 3 hours credit

Detailed analysis of current case studies in the planning and execution of public relations activities. Emphasis given to fact-finding, researching audiences, setting objectives, charting programs, execution, and evaluation. Lecture 3 hours. Prerequisite: PBRL 3823.

## 4973 PUBLIC RELATIONS INTERNSHIP, 3 hours credit

Field experience in public relations in organizations, business, and industry. Prerequisite: 12 hours of Journalism and public relations or permission of the instructor.

RADIO/TELEVISION COURSES (RTV)

## 1013* FUNDAMENTALS OF BROADCASTING, 3 hours credit

Survey of components of broadcasting and other electronic media systems in America, including technical aspects, history, legal and social issues. Lecture 3 hours.

## 2104* AUDIO AND VISUAL PRODUCTION, 4 hours credit

Production of audio and visual support and layout for multimedia. Not applicable for Communications majors with RTV concentration or RTV minors. Lecture 3 hours, laboratory 3 hours. Prerequisite: MM 1133.

## 2113 BROADCAST ANNOUNCING, 3 hours credit

A course designed to meet specific needs of the radio-television announcer; instruction includes drills to develop effective vocal communications as a means of improving radio-television presentation and delivery. Lecture 2 hours, laboratory 3 hours.

## 2213* BASIC RADIO PRODUCTION, 3 hours credit

Introduction to equipment and various aspects of radio station operation. Including: air-checks, commercial production and news. Lecture 3 hours, laboratory.

## 2313* BASIC TELEVISION PRODUCTION, 3 hours credit

An introduction to the basic principles, procedures, and techniques of television production. The course includes video control, special effects, operation of cameras and editing machines, composition, lighting, staging, and directing, on-camera announcing and interviewing. Lecture 2 hours, laboratory 3 hours.

## 3123* BROADCAST PROGRAMS AND RATINGS, 3 hours credit

Principles governing the selection of programs; preparation of broadcast schedules; and audience measurements. Focus will include program types, rating systems, program and audience analysis in radio, television and cable. Lecture 3 hours.

## 3223 ADVANCED RADIO PRODUCTION, 3 hours credit

Theory and practice in the operation of advanced audio recording, and sound creation, and transmission equipment. Lecture 2 hours, laboratory 2 hours. Prerequisite: RTV 2213 or department permission.

## 3323* TV FIELD PRODUCTION AND EDITING, 3 hours credit

Advanced techniques in field production for commercial and industrial television. Emphasis will be given to pre- and post-production stages, as well as training for independent assignments and "electronic news gathering." Lecture 3 hours, laboratory 2 hours. Prerequisite: RTV 2313.

## 3353 PRODUCING THE DOCUMENTARY, 3 hours credit

Preparation for the participation in all phases of documentary production. The course will function as a team process with students participating in one or many aspects of the production. May be repeated for a maximum of six hours. Laboratory 6 hours. Prerequisite: Instructor permission.

## 3413* BROADCAST NEWS, 3 hours credit

Theories and practices of broadcast news gathering, writing and delivery to develop professional attitude and skills in radio and television news. Lecture 3 hours, laboratory 2 hours. Prerequisite: RTV 1013.

## 3513* BROADCAST WRITING, 3 hours credit

Concept and practices of writing for radio and television. Emphasis on writing commercial copy, public service announcements and broadcast news. Lecture 2 hours, laboratory 2 hours. Prerequisites: RTV 1013 and proficiency in typing.

## 3911-2 BROADCAST LAB, 1-2 hours credit

Preparation for and participation in all phases of radio and television; may be repeated. Prerequisite: Department permission.

## 3931-3 WORKSHOP, 1-3 credit hours

Workshop designed to give intensive emphasis to a specific area of broadcasting. May be repeated with a different topic for additional credit up to a maximum of six hours. Communication majors can count only three hours of workshop in any communication area toward the communication degree.

## 4133* BROADCAST MANAGEMENT, 3 hours credit

Intensive investigations into station management functions, advertising and sales, network and labor relations, internal organizational structures, operational procedures, budget planning, and government regulations. Lecture 3 hours.

## 4333* CORPORATE VIDEO, 3 hours credit

Theory and uses of video in business and industry including writing, planning, and production, as well as television programs for instructional and corporate applications. Lecture 2 hours, laboratory 3 hours. Prerequisite: RTV 2313.

## 4343* GRAPHICS FOR VIDEO PRODUCTION, 3 hours credit

An examination of the principles, procedures, and techniques used in creating graphics for video production. While special emphasis is placed on graphics creation for the television medium, students will explore the use of graphics for non-broadcast applications such as distance or adaptive learning. Lecture 2 hours, laboratory 3 hours. Prerequisites: RTV 2313 and RTV 3323.

## 4923 RADIO/TELEVISION INTERNSHIP, 3 hours credit

Supervised work experience in a professional setting which relates to the student's career objectives. The internship will allow practical experience in radio/television. May be repeated for a maximum of six hours. Prerequisites: Upper division standing and department permission.

## 4941-3* SPECIAL TOPICS, 1-3 hours credit

Directed individual or group study of selectee topic(s) in broadcasting. The course may be repeated for credit up to 6 hours. Prerequisite: Junior standing.

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## DEPARTMENT OF

## CRIMINAL JUSTICE AND sociology

CHAIR (INTERIM) - Robert Bausch, Professor
Associate Professors: Youngblood
Assistant Professors: Dudash, Ford, Kervin, Kwenda, Lee, Watts
Pre-Law Advisor: Youngblood
The Department of Criminal Justice and Sociology offers programs leading to a Bachelor of Science degree with a major in Criminal Justice, a Bachelor of Science degree with a major in Sociology, and an Associate Degree in Applied Science in Criminal Justice. The Department also offers minors in Corrections, Law Enforcement, Criminal Justice and Sociology.

## BACHELOR OF SCIENCE DEGREE MAJOR IN CRIMINAL JUSTICE (580)

The study of criminal justice encompasses the policies of the criminal justice system, behavioral characteristics of victims, offenders, and practitioners, and the legal framework within which each operates. The department, through the criminal justice curriculum, provides instruction to students interested in careers in law enforcement, corrections, and associated fields as well as to students interested in graduate school or law school.

I. GENERAL EDUCATION REQUIREMENT
50 hours

General Education requirements are found in the red striped pages.
II. MAJOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 39 hours
 and CJ 4133

| Support Courses <br> At least 9 of these hours must be upper division Criminal Justice courses. The remaining 6 hours may be upper division Criminal Justice courses or they may be any other upper division hours. Departmental approval is required for use of lower division hours. |  |
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III. MINOR

18 hours
(An Associate Degree in Applied Science in Criminal Justice or an equivalent associate degree may be used to satisfy the requirements for a minor. Otherwise, courses used to satisfy major requirements may not be used to satisfy minor requirements.)
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION Please Note: A student must complete at least 40 hours of upper division courses.
V. Required assessment exam taken prior to graduation.

## BACHELOR OF SCIENCE DEGREE MAJOR IN SOCIOLOGY (180)

Sociology is the study of social institutions, social change, and the causes and consequences of human behavior. Sociologists study a broad range of topics, in addition to the dimensions of race, class, and gender and their impact upon the lives of people. Students who major in sociology learn to apply research skills and theoretical knowledge to understanding the challenging issues of our times. Sociology graduates may find employment in the fields of social services, business, criminal justice, health services, government services, and teaching.
I. GENERAL EDUCATION REQUIREMENT ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... 36 hours
*Required Courses 15 hoursSOCI 1113, SOCI 2013, SOCI 2023, SOCI 2223, SOCI 3123*Sociology majors are required to earn a C or higher in each requiredcourse for the major.
Electives 21 hoursA minimum of 18 hours of these electives must be selected fromSociology classes numbered 3000 or above.
III. MINOR ..... 18 hours
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION. Please Note: A student must complete at least 40 hours of upper division courses.
V. Required assessment exam taken prior to graduation.

## ASSOCIATE IN APPLIED SCIENCE DEGREE IN CRIMINAL JUSTICE (550)

The study of criminal justice encompasses the policies and processes of the criminal justice system, behavioral characteristics of victims, offenders and practitioners, and the legal framework within which each operates. The curriculum for this AAS degree focuses particularly upon the operations and impact of law enforcement and corrections within the criminal justice system. Successful completion of this program of study prepares graduates for entry level careers in law enforcement or corrections and/or for more advanced education.

## I. GENERAL EDUCATION REQUIREMENT <br> 24 hours

| Required Courses ENGL 1113, ENGL 1213 HIST 1493, SOCI 1113 |  |
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Approved General Education Electives . . . . . . . . . . . . . . . . . ........ 6 hours
One mathematics course numbered 1513 or above or a biological or physical science course, and one course from Humanities or Physical Education.
II. MAJOR ..... 33 hours
Required Courses ..... 15 hours
CJ 1013, CJ 1023, CJ 1033, CJ 1113, CJ 2033
Electives 18 hours
Select either Group A or Group B with the appropriate Support Courses.Group A: (Law Enforcement) Select at least 12 hours from the followingcourses: LE 2003, LE 2013, LE 2043, LE 2053, LE 2063, CJ 2023
Support courses for Group A: Select 6 hours from the following courses:CORR 2043, CORR 2053, CORR 2063, CJ 2001-3, CORR 2013,CORR 2003, CORR 2023
Group B: (Corrections) Select 12 hours from the following courses:CORR 2003, CORR 2023, CORR 2013, CORR 2043, CORR 2053,CORR 2063, CJ 2023
Support courses for Group B: Select 6 hours from the following courses:LE 2003, LE 2043, LE 2053, LE 2063, CJ 2001-3, LE 2013
III. ELECTIVES TO COMPLETE 64 HOURS REQUIRED FOR GRADUATION
IV. Required assessment exam taken prior to graduation.

## ANTHROPOLOGY COURSES (ANTH)

## 1113* INTRODUCTION TO ANTHROPOLOGY, 3 hours credit

A general introduction to the principles of physical and socio-cultural anthropology. Topics to be covered include an analysis of human evolution, origins of agriculture and civilization, existing pre-industrialized and industrialized peoples, and the institutions of the family and kinship, religion, economics, government, and education. Lecture 3 hours.

## 3023* PREHISTORIC SOCIETIES, 3 hours credit

An introduction to prehistoric social life. A study of the social organization, economic practices, technology, and belief systems of prehistoric people. The course surveys important archeological sites beginning with human origins in Africa, migration into Europe and Asia, and entrance into and occupation of the Western Hemisphere. Lecture 3 hours. Prerequisite: ANTH 1113 or SOCI 1113.

## 4493* SELECTED TOPICS IN ANTHROPOLOGY, 3 hours credit

An intensive analysis of a selected cross-cultural issue or special topic in anthropology. May include lecture, laboratory, and/or field trips. May be repeated with a different topic for a total of 6 hours credit Prerequisites: Junior standing and permission of instructor.

## CORRECTIONS COURSES (CORR)

## 2003 CORRECTIONAL TREATMENT METHODS, 3 hours credit

A study of correctional institutions, methods of correctional treatment and the social services provided to convicted persons and their dependents. An analysis of the criminal behavior that characterizes the different types of offenders. Lecture 3 hours. Prerequisites: CJ 1013 and PSY 1113.

## 2013 INTRODUCTION TO CORRECTIONS, 3 hours credit

A general introduction to American corrections, including theories of punishment, social systems within
correctional institutions, correctional history, contemporary prison issues, juvenile corrections and community corrections. Lecture 3 hours. Prerequisites: CJ 1013 or concurrent enrollment.

## 2023* CASE MANAGEMENT, 3 hours credit

This course focuses on the basic principles of case management, including the case manager's duties and responsibilities, case reports and records, and case management in several types of agencies. The course also includes treatment of issues of confidentiality, human rights, and ethics. Lecture 3 hours.

## 2043 COUNSELING ADULT AND JUVENILE OFFENDERS, 3 hours credit

Techniques involved in counseling and supervising adult and juvenile offenders. Emphasis is on development of effective communication models and treatment oriented programs for counseling clients in a correctional environment. Focus is on the development of rapport with court directed or court committed adult and juvenile offenders. Lecture 3 hours. Prerequisite: CJ 1013 and PSY 1113.

## 2053 COMMUNITY CORRECTIONS, 3 hours credit

Role and structure of state pardon and parole boards; options of the governor; legal duties of pardon and parole boards, parole probation officers, rights of inmates to be considered for parole; effects of parole actions on the community; legal limitations placed on parolees, revocation of parole. Lecture 3 hours. Prerequisite: CJ 1013.

## CRIMINAL JUSTICE COURSES (CJ)

## 1013* INTRODUCTION TO CRIMINAL JUSTICE, 3 hours credit

A study of the historical development of the criminal justice system, contemporary agencies, and processes involved in the system. Introduction to the three main components of the criminal justice system: police, courts and corrections. Lecture 3 hours.

## 1023 COMMUNITY RELATIONS, 3 hours credit

Critical consideration of the criminal justice system's capacity to deal with crime, and its relationship to the citizenry. Emphasis on programs to provide effective community relations. Lecture 3 hours. Prerequisite: CJ 1013.

## 1033 CRIMINAL LAW, 3 hours credit

A review of substantive criminal law including the classification and definition of crimes and defenses to crimes. Lecture 3 hours.

## 1113 APPLIED CRIMINOLOGY, 3 hours credit

Applications of criminology in the criminal justice system. An overview of past, present, and future trends in crime causation. Lecture 3 hours. Prerequisite: CJ 1013 or concurrent enrollment.

## 2001-3 SPECIAL PROBLEMS IN CRIMINAL JUSTICE, Up to 3 hours credit

An analysis of a selected problem or special topic in criminal justice, corrections and/or law enforcement. May be repeated, with different topics, for a total of 6 hours credit. Prerequisites: Sophomore standing and departmental permission.

## 2023* CRIMINAL JUSTICE REPORTING 3 hours credit

This course focuses on the preparation and use of standardized criminal justice reports and forms used to document facts and circumstances. The application of these documents in corrections, law enforcement, the judiciary, and the private sector is included. Lecture 3 hours. Prerequisites: CJ 1013 and ENGL 1113.

## 2033* CRIMINAL PROCEDURES, 3 hours credit

An examination of constitutional case law as decided by the U.S. Supreme Court. Focus is on the criminal justice system and its relation to government powers and citizen's constitutional rights. Lecture 3 hours. Prerequisites: CJ 1013 or instructor's permission.

## 3003* JUVENILE JUSTICE SYSTEM, 3 hours credit

The study of the juvenile justice system in the United States. Juvenile crime, the courts, community services, including prevention and rehabilitation of juveniles. Lecture 3 hours. Prerequisites: CJ 1013, CJ 1033, and CJ 1113.

## 3013* ORGANIZED AND WHITE COLLAR CRIME, 3 hours credit

A study of organized and white collar crime strategies and techniques used to combat them. Lecture 3 hours. Prerequisites: CJ 1013 and CJ 1033.

## 3023* VICTIMOLOGY, 3 hours credit

Comprehensive study of victimization; analysis of contemporary victim-assistance and victim compensation programs and related research; review of the historical importance of victim restitution as a basis for punitive criminal law. Lecture 3 hours. Prerequisites: 12 hours of CJ or department permission.

## 3033* CONCEPTS OF CRIMINAL JUSTICE, 3 hours credit

A study of current and emerging theories and concepts in criminal justice. May be repeated with different topics for a total of 6 hours credit. Lecture 3 hours. Prerequisite: 12 hours of CJ or department permission.

## 3043 MANAGEMENT OF CORRECTIONAL SYSTEMS, 3 hours credit

The management of correctional systems, public and private. Includes organizational theory supervision, planning, management styles, public relations, security issues, information systems and liability issues in correctional agencies. Lecture 3 hours. Prerequisite: CJ 1013 and CORR 2013 or instructor's permission.

## 3053 EVIDENCE, 3 hours credit

A study of the procedures for conducting civil litigation and criminal trials. Lecture 3 hours. Prerequisites: PS 1113, CJ 1013, CJ 2033.

## 3723 INTERNSHIP IN CRIMINAL JUSTICE, 3 hours credit

Placement of advanced criminal justice majors in community-based agencies for career development. Involves frequent contact with faculty supervisor and off-campus supervisor evaluation. May be repeated for a total of 6 hours credit. Ṕrerequisites: CJ major, junior standing, and instructor's permission.

## 4023* TERRORISM, 3 hours credit

An analysis of terrorism and how our criminal justice system deals with this problem in both the national and international arenas. Definition, structure, causes, methods and treatment/prevention of terrorism, and coping with hostage situations. Lecture 3 hours. Prerequisite: CJ 1013 or junior standing or department permission.

## 4133* CRIMINAL JUSTICE ADMINISTRATION, 3 hours credit

The administration of criminal justice agencies. Includes organization theory, supervision, planning, personnel policies, management styles, public relations and budgeting in law enforcement, judicial and corrections agencies. Lecture 3 hours. Prerequisite: CJ 1013 or PS 2713 or Junior standing or department permission.

## 4143 SEXUAL ABUSE AND THE CRIMINAL JUSTICE SYSTEM, 3 hours credit

An examination of the problems of sexual abuse and its treatment by the criminal justice system. Sexual abuse issues including legal definition, causes, identification, prevention/treatment for victims and perpetrators, types and how the criminal justice system responds. Lecture 3 hours. Prerequisite: Junior standing or department permission.

## 4153* DEATH PENALTY, 3 hours credit

An examination of the problems and issues related to the death penalty in the United States, including the history of capital punishment, important Supreme Court decisions, how the various jurisdictions (state, federal and military) deal with the capital cases, the comparative costs of incarceration and execution, miscarriages of justice in capital cases and how the criminal justice responds to these issues. Lecture 3 hours. Prerequisites: Junior standing or department permission.

## 4491-3* SELECTED TOPICS IN CRIMINAL JUSTICE, 1 - 3 hours credit

An intensive analysis of a selected problem related to criminal behavior and the commission of crime or another special topic in criminal justice. May be repeated with different topics for a total of 6 hours credit. Lecture 1-3 hours. Prerequisite: Junior standing, CJ major or instructor's permission.

## 4503* COMPARATIVE CRIMINAL JUSTICE SYSTEMS, 3 hours credit

A comparative study of selected criminal justice systems existing in the world. Lecture 3 hours. Prerequisites: CJ 1013, PS 1113, or junior standing and instructor's permission.

## 4591-3* INDEPENDENT STUDY IN CRIMINAL JUSTICE, 1 -3 hours credit

Intensive independent reading on or study of a specific criminal justice problem or subject, based on a pre-approved outline or plan, with regular conferences with the instructor and submission of extensive written work. May be repeated with different topics for a total of 6 hours credit. Prerequisites: CJ major, junior standing, and instructor's permission.

## LAW ENFORCEMENT COURSES (LE)

## 2003 SECURITY CONCEPTS, 3 hours credit

A study of techniques used in providing security to government, industry, business, and private institutions. The functions of criminal justice personnel in crime prevention management. Lecture 3 hours. Prerequisites: CJ 1013 and CJ 1113.

## 2013 INTRODUCTION TO LAW ENFORCEMENT, 3 hours credit

An introduction to the philosophy and application of law enforcement. An examination of the types and methods of patrol activities and their tactical considerations. The powers and limitations of the law enforcement officer as revealed in case studies and the decision making considerations required by law enforcement officers. Lecture 3 hours.

## 2043* COMMUNITY POLICING, 3 hours credit

The concept and application of community policing in law enforcement. The course will include a discussion of the role of community involvement, interaction with community organizations, complex problem solving, and effective techniques for the reduction of opportunities for crime. Lecture 3 hours. Prerequisites: CJ 1013 and CJ 1113.

## 2053 METHODS OF INVESTIGATION I, 3 hours credit

The duties of law enforcement personnel who initially respond to different categories of crime scenes. Specific topics include crime scene protection, interviewing witnesses, and chain of custody issues. Lecture 3 hours. Prerequisites: CJ 1013, CJ 1033 and CJ 1113.

## 2063 METHODS OF INVESTIGATION II, 3 hours credit

The role of law enforcement personnel in the preparation of a case for presentation in court. Coverage will include successful case management techniques that encompass current and emerging forensic technologies. Lecture 3 hours. Prerequisite: CJ 1013, CJ•1033 and CJ 1113.

## SOCIOLOGY COURSES (SOCI)

## 1113* INTRODUCTORY SOCIOLOGY, 3 hours credit

A general survey of the scope and problems of sociology; a study of the forces which cause the development of human relationships which influence the rise and growth of people, and impel the organizations composing human society. Lecture 3 hours.

## 2013* SOCIAL STATISTICS, 3 hours credit

The use and interpretation of statistics in the current professional journals and other sociological literature. Lecture 3 hours. Prerequisites: SOCI 1113 and MATH 1513 or higher.

2023* SOCIAL PROBLEMS, 3 hours credit
An analysis of the nature, history, and scope of current problems in the areas of poverty, crime, the family, health, race relations, mental illness, suicide, and substance abuse. Lecture 3 hours.

## 2043* APPLIED SOCIOLOGY, 3 hours credit

A study of the application of sociological concepts and research findings in such areas as business and industry, community development, education, medicine, recreation and public policy formation. Lecture 3 hours. Prerequisite: SOCI 1113.

## 2223* METHODS IN SOCIAL RESEARCH, 3 hours credit

Introduction to the basic concepts of social research: parametric and non-parametric techniques, formulation, and testing of hypothesis, research, sampling problems, and interpretation of data. Lecture 3 hours. Prerequisites: SOCI 1113. Concurrent enrollment in SOCI 2013 is heavily recommended. Permission of instructor necessary for students without prior or concurrent statistics course.

## 2503* POPULAR CULTURE, 3 hours credit

This course is an analytical, historical, and theoretical introduction to the study of popular culture. The course will stress critical and normative interpretations of popular culture in the organization and representation of social life, especially the relations of dominance and subordination in the production and consumption of cultural commodities. In addition to exploring recent debates within popular culture studies, this course examines the global implications of mass culture as a means of cultural homogenization and social control. Lecture 3 hours. Prerequisite: SOCI 1113.

## 3003* DEVIANT BEHAVIOR, 3 hours credit

An in-depth study of current sociological theories of deviant behavior. Lecture 3 hours. Prerequisite: SOCI 1113.

## 3013* RACIAL AND CULTURAL MINORITIES, 3 hours credit

Investigation of the sociological processes of a racially and culturally heterogenous society; migration, accommodation, assimilation, amalgamation, segregation, pluralism. Lecture 3 hours. Prerequisite: SOCI 1113 or SOCI 2023.

## 3123* CONTEMPORARY SOCIOLOGICAL THEORY, 3 hours credit

Survey of contemporary sociological theories of society, including symbolic interactionism, communication theory, systems theory, ethnomethodology, mathematical theories, power theories, etc. Lecture 3 hours. Prerequisite: SOCI 1113.

## 3323* COLLECTIVE BEHAVIOR, 3 hours credit

A study of the social process as it pertains to group interaction. An understanding of individual needs in relation to the social situation with an emphasis on crowd and mob psychology, public opinion, rumor, fads, fashions and mass society. The relationship between collective behavior, and social change in terms of innovation, conflict, political movements, and religious revivals. Lecture 3 hours. Prerequisite: SOCI 1113.

## 3333* THE SOCIOLOGY OF SMALL GROUPS, 3 hours credit

A study of the dynamics of social interaction within the context of primary group structures. Attention will be given to selected examples of primary group experience. Lecture 3 hours. Prerequisite: SOCI 1113.

## 3343* POLITICAL SOCIOLOGY, 3 hours credit

A study of man's social environment as it relates to and interacts with man's political world. Included is consideration of the sociological influences on man's political behavior in the following areas: (a) power distribution on the national, state and local levels; (b) public opinion, voting behavior, and political participation; (c) interest group formation and structure; (d) the forces of political change and ideological movements; and (e) the legal-institutional level of political decision making. Lecture 3 hours. Prerequisite: SOCI 1113 or PS 1113 or PS 3023.

## 3353* SOCIAL DEMOGRAPHY, 3 hours credit

An analysis of the influence of social and cultural settings on natality, mortality and migration. This course also includes an assessment of the impact of demographic change on social systems. Lecture 3 hours. Prerequisite: SOCI 1113.

## 3373* SOCIOLOGY OF THE COMMUNITY, 3 hours credit

The community, its structure, systems and processes. The influence of geography and patterns of settlement upon urban and rural life. Population growth and migratory patterns. Lecture 3 hours. Prerequisite: SOCI 1113.

## 3403* SOCIOLOGY OF THE FAMILY, 3 hours credit

An analysis of family types and kinship systems from a cross-cultural perspective. Emphasis will be on anthropological and sociological research and theory related to the origin, development, history and the perseverance and alterations of family patterns and kinship systems as a result of technological and socio-cultural change. Lecture 3 hours. Prerequisite: SOCI 1113.

## 3413* GERONTOLOGY, 3 hours credit

An in-depth study of various aspects of aging from a broad interdisciplinary perspective. Lecture 3 hours. Prerequisite: SOCI 1113.

## 3423* DEATH AND DYING, 3 hours credit

Death and dying as social phenomena including cross-cultural perspectives. An understanding of personal coping skills, and occupations and professions dealing with terminal patients in hospitals and with funerals. Lecture 3 hours.

## 3513* INTRODUCTION TO SOCIAL WELFARE AND HUMAN SERVICES, 3 hours credit

An introduction to the Social Welfare institution and the purposes, concepts, methods, and theories used in the delivery of Human Services. Lecture 3 hours. Prerequisites: SOCI 1113 and SOCI 2023.

## 3523* THE SOCIOLOGY OF MENTAL ILLNESS, 3 hours credit

An analysis of sociological perspectives on mental illness. Included will be an examination of the problem of definition, the cross-culture regularities and differences, the sociological variable and the process of caring for and treating psychiatric patients from the sociological perspective. Lecture 3 hours. Prerequisite: PSY 1113 or SOCI 2023.

## 3733* SOCIOLOGY OF GENDER, 3 hours credit

This course will examine the processes by which gender is socially constructed, along with the distinction between biological sex and sociological gender, the causes and consequences of gender inequality, and a historical overview of gender relations in different social institutions and societies. Lecture 3 hours, Prerequisite: SOCI 1113.

## 3991-3 INTERNSHIP IN SOCIOLOGY, $1-3$ hours credit

The placement of sociology majors in various applied job settings. The course involves frequent contact with a faculty supervisor and an off-campus supervisor evaluation. May be repeated for a total of 6 credit hours. Prerequisites: Student must be a sociology major, have junior or senior standing and permission of instructor.

## 4003* CRIMINOLOGY, 3 credit hours

Current social research and theory dealing with crime, and society. Lecture 3 hours. Prerequisite: SOCI 2023 or permission of the department.

## 4013* JUVENILE DELINQUENCY, 3 hours credit

An in-depth analysis of juvenile delinquency with regard to its development, treatment and prevention. Lecture 3 hours. Prerequisite: SOCI 1113.

## 4213* SOCIAL STRATIFICATION, 3 hours credit

A study of social inequality, with emphasis on the class structure of the United States and its consequences for the individual, groups, and society. Lecture 3 hours. Prerequisites: SOCI 1113 and junior standing.

## 4303* GLOBALIZATION AND DEVELOPMENT, 3 hours credit

This course examines the current epoch of globalization, tracing its historical trajectory from the $17^{\text {th }}$ century development of mercantilism and colonialism, the post-World War II rise of multinational corporations, and to the post-1989 expansion of global democracy. The causes and effects of globalization are examined primarily in the changing historical context of economy, politics, and culture. Additionally, this course emphasizes comparative understanding of how the effects of global changes are interwoven with various aspects of culture and everyday social life. Lecture 3 hours. Prerequisite: SOCI 1113.

## 4403* DOMESTIC VIOLENCE, 3 hours credit

A focus on child, spouse, and elderly abuse with a discussion of services available to the abused. Social influences will be examined that may cause or reinforce violent behavior in the home. Lecture 3 hours. Prerequisites: SOCI 1113 and SOCI 3403 or FAMS 1123.

## 4491-3* INDEPENDENT STUDY, $1-3$ hours credit

Intensive independent readings or study of definite problems or special subjects, based on pre-approved outlines or plans, with regular conferences and with oral and written reports. Prerequisite: 15 hours of Sociology or permission of the department chairman. May be repeated with a different topic for a total of 6 hours credit.

## 4533 HUMAN SERVICES COUNSELING STRATEGIES, 3 hours credit

A study of counseling and interviewing strategies useful in a human services context. Role playing using such techniques as paraphrasing, reflecting, and open questions will be part of the classroom experience. Lectures and discussion. Lecture 3 hours. Prerequisites: SOCI 1113 and permission of department.

## 4591-3* SELECTED TOPICS IN SOCIOLOGY, $1-3$ hours credit

An intensive analysis of a selected problem or topic in Sociology. May be repeated with a different topic for a total of 6 hours credit. Lecture 1-3 hours. Prerequisite: 12 hours Sociology or permission of the instructor.

## 4793* SENIOR SEMINAR: SELECTED TOPICS IN SOCIOLOGY, 3 hours credit

Intensive studies of a major sociological concern, such as criminology, demography, race and ethnic relations, mass communication, theory, etc. Lecture 3 hours. Prerequisite: Senior standing or permission of the instructor.

* Liberal arts and sciences course.


## DEPARTMENT OF

## EnGLISH AND FOREIGN LANGUAGES

CHAIR - Margery Kingsley, Professor<br>Professors: Cardwell, Lubrano, Morris, Stanley, Underwood<br>Associate Professors: Hodgson, Thomlinson<br>Assistant Professors: Davis, Hensley, Zhou<br>Instructors: Godwin, Honeycutt, Miller, Roberts, Santiago, Vantine, Younger<br>Director, Center for Writers: Kinslow<br>Assistant Director, Center for Writers: Hooley<br>Director, Language Learning Center: Clopton

The Department of English and Foreign Languages offers programs leading to a Bachelor of Arts degree with a major in English, a Bachelor of Arts degree with a major in English Education, a Bachelor of Arts degree with a major in International Languages, and a Bachelor of Arts degree with a major in Romance Languages Education. The department also offers minors in English, Professional Writing, Foreign Languages, French, German, Latin, and Spanish.

## BACHELOR OF ARTS DEGREE MAJOR IN ENGLISH (120)

This degree has two emphases: English and Creative Writing. The English emphasis is designed for students contemplating graduate work, including law school; for students desiring careers in technical writing, editing, public relations and the like; and for students desiring a broad general background in literature. The Creative Writing emphasis is designed for students who wish to become professional writers or to work in other capacities in the publishing industry.
I. GENERAL EDUCATION REQUIREMENT
General Education requirements are found on the red striped pages.

English majors must complete one of the following emphases.

## I. English

Required Courses: ENGL 3003, 3023 or 3033, 3043 or 3053,3063 or 3073,3303 or 3013,4613 or 4623 , and 4992.
Electives: $\mathbf{2 5}$ hours of English and/or Professional Writing courses, 2000 level or higher, excluding ENGL 2013.

## II. Creative Writing

Required Courses: ENGL 3003, ENGL 3013, PRWR 3003 or 3013, PRWR 3103, 3203 or 3403, ENGL 3033 or 3053, and ENGL 3523, 4123 or 4413, and 4992.
Electives: 27 hours: 12 ENGL, 13 PRWR-all but 6 of which must be at 3000 level or above.

[^6]IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION A grade of " C " or better in the major courses will be required of all Teacher Certification candidates.

## BACHELOR OF ARTS DEGREE MAJOR IN ENGLISH EDUCATION (125)

I. GENERAL EDUCATION REQUIREMENT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50 hours

General Education requirements are found on the red striped pages.
The English Education program requires specific courses for meeting
General Education requirements in behavioral science and humanities as follows:
English Education majors should
(a) Choose PSY 1113 (a prerequisite to EDUC 3733 to meet the Behavioral Science requirement
(b) chouse PHIL 1113 or 2213 as 3 hours of the Humanities requirement
(c) choose from ART 1013, ART 2613, ART 2623, THTR 1103, FNAR 1013, MUSC 1013, MUSC 1023, MUSC 1033, or MUSC 1413 to meet the other 3 hours of the Humanities requirement
II. MAJOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 74 hours

Required Course Courses 41 hours
ENGL 3003, 3023 , 3033, 3043, 3053, 3063, 3073, 3113, $3303,4613,4623,4773$, and 5 hours of English electives

Required Education Courses . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 33 hours
EDUC 1800, 3003, *3612, 3673, 3733, 3753 (R), 4313 (R), $4653(\mathrm{R}), * 4965(\mathrm{R}), * 4975(\mathrm{R})$, and SPED 3103

* Should be taken in the professional semester
(R) Restricted to students admitted to Teacher Education


## III. ELECTIVES TO COMPLETE 124 HOURS REQUIRED FOR GRADUATION

English Education candidates must achieve a grade of $C$ or better in all major courses (required core courses and required education courses) in order to receive credit toward a degree. If a grade of $D$, F , or U is achieved, the course must be repeated.

English Education candidates must demonstrate foreign language proficiency (listening and speaking) at the novice-high level as defined by the American Council on the Teaching of Foreign Languages by passing a Department of English and Foreign Languages proficiency test or by taking a foreign language course.

## Teacher Licensure/Certification

The student who completes the requirements for this degree and passes the state tests for certification in English Education will be eligible to apply for a standard teaching license.

## ENGLISH COURSES (ENGL)

## 0103 BASIC COMPOSITION SKILLS, 3 hours credit (Remedial/Developmental Course)

Introduces students to and provides practice in reading, writing, and interpretation. Intended for students whose experiences as writers have not prepared them for ENGL 0113. Attention to the development of language skills is integrated into the course's primary emphasis upon essay writing. Required for entering students who score below 16 on the ACT English test and for adult students who score below 65 on the CPT Sentence Skills test. Individual conferences are arranged as needed. Does not satisfy degree requirement for any degree program at Cameron University. Lecture 3 hours.

## 0111 COLLEGE WRITING SKILLS (Remedial/Developmental Course)

Individualized, student-paced plan of study and practice in college writing skills under the direction of Writing Center staff. Does not satisfy any degree requirements for any degree program at Cameron University. Laboratory 2 hours.

## 0113 DEVELOPMENTAL WRITING (Remedial/Developmental Course)

Provides practice in reading, writing and interpretation for students whose experiences as writers have not prepared them for ENGL 1113. Attention to the development of language skills is integrated into the course's primary emphasis on essay writing. Required for entering students who score greater than 15 but less than 19 on the ACT English test and for adult students who score greater than 64 but less than 96 on the CPT Sentence Skills test. Individual conferences are arranged as needed. Does not satisfy any degree requirement for any degree program at Cameron University. Lecture 3 hours.

## 1113* ENGLISH COMPOSITION I, 3 hours credit

Regular practice in reading and interpreting college-level texts and in writing expository essays that synthesize, incorporate and document the use of those texts to develop proficiency in critical thinking, reading, and writing. Lecture 3 hours.

## 1123* HONORS COMPOSITION I, 3 hours credit

Reading and discussion of essays which serve as models of style, point of view, and logic. Emphasis on composition and rhetoric to develop written proficiency. An interdisciplinary approach to course content is included. Lecture 3 hours. Prerequisite: Permission of instructor or English ACT score of 23 or higher.

## 1213* ENGLISH COMPOSITION II, 3 hours credit

Continued training and practice in composition and introduction to literature through the writing of multiple essays, at least one of which is a documented research paper using MLA style. Lecture 3 hours. Prerequisite: ENGL 1113.

## 1223* HONORS COMPOSITION II, 3 hours credit

Reading and discussion of short stories, poetry, drama, and novels as an introduction to literary appreciation. Emphasis on written critical analysis of specific works. Lecture 3 hours. Prerequisite: ENGL 1123 or a grade of "A" in ENGL 1113 or permission of instructor.

## 2013* POPULAR FICTION, 3 hours credit

Reading and discussion of twentieth-century short stories and novels. This course may not be counted toward a major in English. Lecture 3 hours. Prerequisite: ENGL 1213.

## 2053* FILM AS LITERATURE, 3 hours credit

The study of film as an educational, verbal, and visual medium for storytelling. Emphasis on literature adapted for film and on literary aspects of non-adapted great films. Lecture 3 hours.

## 2313* AFRICAN AMERICAN LITERATURE, 3 hours credit

A survey of writings by African American authors from Colonial times to the present. Lecture 3 hours.

## 2323* AMERICAN INDIAN LITERATURE, 3 hours credit

Examination of Native American literature, with emphasis on contemporary authors. Attention is directed to traditional myths and legends as they relate to contemporary themes. Lecture 3 hours.

## 2333 INTRODUCTION TO TECHNICAL WRITING, 3 hours credit

Introduces students to the basis principles of effective written communication as applied in a variety of professional settings (e.g., business, industry,. government). Reviews elements of grammar, mechanics, and style as related to technical writing; trains students in collecting, organizing, presenting and documenting information in formal reports and in writing other kinds of documents (e.g., correspondence, proposals, manuals) appropriate to professional settings; encourages students to develop a sense of professionalism about their writing. Lecture 3 hours. Prerequisite: ENGL 1213.

## 2343* WOMEN IN LITERATURE, 3 hours credit

Historical and analytical exploration of the images of women in literature, with emphasis on women writers. Lecture 3 hours.

## 2413* THE BIBLE AS LITERATURE I, 3 hours credit

Starting with Genesis and concluding with Song of Solomon, an exploration of the major types of literature present in the Old Testament-narrative history, legal writing, poetry, and wisdom writings. Students will study passages of books from the Torah, Nebim, and Kethubim. The first third of the course will introduce students to basics of literary analysis: plot, character, theme, and figurative language. The second third will emphasize more complex concepts such as voice and rhetorical perspective. The final third will focus on those books, particularly Job, Ecclesiastes and the Psalms, that have significantly impacted the themes and structure of literature in English. Lecture 3 hours.

## 2423* THE BIBLE AS LITERATURE II, 3 hours credit

Exploring the Gospels, Epistles, and Apocalyptic Literature, this course continues Bible as Literature I by first examining how English translation of the Bible in the $16^{\text {th }}$ century profoundly impacted English, American and other literary traditions. The first third of the course will focus on the Gospels, emphasizing narrative perspective, figurative language and literary allusion. The second third will emphasize the Pauline epistles, their rhetorical strategies and the literary tradition they have inspired among writers in English. In the final third of the course; students will study the apocalyptic/mystic traditions of the Bible through readings in Isaiah, Ezekiel, Jeremiah and Revelations. Lecture 3 hours.

## 2980-3* SELECTED TOPICS IN LANGUAGE ARTS, 0-3 hours credit

Directed individual or group study of selected topics or problems in Language Arts. Areas of study will vary from semester to semester. The course may be repeated for additional credit with departmental permission. Prerequisites: As listed for each separate offering, and/or departmental permission.

## Completion of English Composition II and junior standing or permission of Department of English are required for enrollment in classes numbered 3000 or above.

## 3003* INTRODUCTION TO LITERARY STUDIES, 3 hours credit

Prepares students for upper division literature courses by introducing them to the terms, critical skills, and literary concepts useful for advanced literary study. Lecture 3 hours.

## 3013* NONFICTION PROSE, 3 hours credit

Writing and editing creative nonfiction prose, including the personal essay. Lecture 3 hours.
3023* SURVEY OF AMERICAN LITERATURE TO 1865, 3 hours credit
A survey of American literature from its beginning to Whitman. Lecture 3 hours. Prerequisite: ENGL 1213.

## 3043* SURVEY OF ENGLISH LITERATURE TO 1800, 3 hours credit

A survey of English literature from its beginning to the close of the eighteenth century. Lecture 3 hours. Prerequisite: ENGL 1213.

## 3053* SURVEY OF ENGLISH LITERATURE SINCE 1800, 3 hours credit

A survey of English literature from the beginning of the nineteenth century to the present. Lecture 3 haurs. Prerequisite: ENGL 1213.

3063* SURVEY OF WORLD LITERATURE THROUGH THE RENAISSANCE, 3 hours credit Readings in world literature from classical antiquity to 1700, with emphasis on major authors. Lecture 3 hours. Prerequisite: ENGL 1213.

## 3073* SURVEY OF WORLD LITERATURE SINCE THE RENAISSANCE, 3 hours credit

Reading of major works in world literature from the post-Renaissance period to the present. Lecture 3 hours. Prerequisite: ENGL 1213

## 3113* SHAKESPEARE, 3 hours credit

Interpretation and criticism of selected works of Shakespeare. Lecture 3 hours.

## 3123* ENGLISH LITERATURE OF THE SIXTEENTH CENTURY, 3 hours credit

Reading and discussion of sixteenth-century dramatic and non-dramatic works with a special emphasis on the major literary figures of the period. Lecture 3 hours.

## 3213* ENGLISH LITERATURE OF THE EARLY SEVENTEENTH CENTURY, 3 hours credit

A study of English poetry, prose, and non-Shakespearean drama from 1600-1660, including works by such key figures as Jonson, Donne, Milton, and Marvell. Lecture 3 hours.

## 3303* ADVANCED COMPOSITION, 3 hours credit

Critical scrutiny of the structure and style of prose. Study of how rhetorical principles are used and can be taught. Lecture 3 hours. Frequent papers.

## 3513* THE AMERICAN NOVEL, 3 hours credit

A critical analysis of representative American novels written through World War II. Lecture 3 hours.

## 3523* THE CONTEMPORARY AMERICAN NOVEL, 3 hours credit

A critical analysis of representative major American novels written since World War II. Lecture 3 hours.

## 3533* CONTEMPORARY POETRY, 3 hours credit

An intensive study of a selection of poets who exemplify styles and trends of recognized significance in poetry of the last four decades. Lecture 3 hours. Prerequisite: ENGL 1213.

## 3613* ROMANTIC AGE, 3 hours credit

An intensive study of the five major poets of the Romantic Period: Wordsworth, Coleridge, Byron, Shelley, and Keats. Lecture 3 hours.

## 3713* VICTORIAN AGE, 3 hours credit

The poetry and prose of leading authors of the Victorian period, including study of the problems of the Victorian era that bear upon major British writers. Lecture 3 hours.

## 3881-3* WORKSHOP, 1-3 hours credit

Designed to emphasize special topics in English and the Language Arts. May be repeated with departmental permission.

## 4053* SEMINAR IN LITERATURE, 3 hours credit

Investigation of one or more authors or a topic of special interest such as a literary theme, movement or
form. The topic varies from semester to semester. Students may repeat ENGL 4053 once for credit but may not elect the same topic. Seminar 3 hours. Prerequisite: Departmental approval.

## 4113* THE ENGLISH NOVEL, 3 hours credit

Critical analysis of representative novels from the eighteenth century to Thomas Hardy. Lecture 3 hours.
4123* THE MODERN ENGLISH NOVEL, 3 hours credit
Critical interpretation of major English novels from Joseph Conrad to the present. Lecture 3 hours.

## 4213* CHAUCER, 3 hours credit

Critical analysis of the poetry of Geoffrey Chaucer, in the original language, with emphasis on The Canterbury Tales. Lecture 3 hours.

## 4313* AMERICAN DRAMA, 3 hours credit

An examination of representative American plays from naturalistic tragedy to farce, with emphasis on the period since 1918. Lecture 3 hours.

## 4323* THE AMERICAN RENAISSANCE, 3 hours credit

Intensive study of the prose, fiction, and poetry of the major American writers of the mid-nineteenth century. Lecture 3 hours.

## 4413* MODERN AMERICAN AND BRITISH POETS, 3 hours credit

Contemporary trends in British and American poetry, selected works from the major poets. Lecture 3 hours.

## 4513* ENGLISH LITERATURE OF THE RESTORATION AND EIGHTEENTH CENTURY, 3 hours credit

A study of British drama, poetry, and prose of the Restoration and eighteenth century, including the works of such major figures as Dryden, Swift, Pope, Johnson, and Blake. Lecture 3 hours.

## 4613* ENGLISH LINGUISTICS, 3 hours credit

A linguistic approach to the phonology, morphology, and syntax of the English language, with attention given to semantics and to the origins and development of the language. Lecture 3 hours.

## 4623* ADVANCED GRAMMAR AND USAGE, 3 hours credit

A review of formal English grammar; improvement and practice in functional grammar and usage. Lecture 3 hours.

## 4633* RHETORIC: THEORY AND APPLICATION, 3 hours credit

A study of traditional and current rhetorical theories with applications for teachers and writers. Consideration is given to discovery of ideas, organization of materials, style, rhetorical stance, and audience analysis, Lecture 3 hours.

## 4643* INTRODUCTION TO OLD ENGLISH, 3 hours credit

A study of the grammatical features of written English between 449 and 1100, with readings in Old English prose and poetry. Prerequisite: ENGL 4613 or permission of the department.

## 4653* INTRODUCTION TO MIDDLE ENGLISH, 3 hours credit

A study of the grammatical features of written English between 1100 and 1500 , with readings in Middle English prose and poetry. Prerequisite: ENGL 4613 or permission of the department.

## 4773 TEACHING OF ENGLISH, 3 hours credit

An introduction to methods and materials in teaching high school English. Teacher Certification students must be admitted to teacher education prior to enrollment in this course. Lecture 2 hours, laboratory 2 hours. Prerequisite: Departmental approval.

## 4813* LITERARY THEORY, 3 hours credit

A historical examination of the concepts that guide our evaluation, interpretation, and appreciation of literature. Emphasis will be placed on the practical application of literary theory in teaching and criticism. Lecture 3 hours.

## 4961-3* DIRECTED READINGS IN ENGLISH, $1-3$ hours credit

Intensive independent reading and research on a selected topic, writer, or movement in literature or language, under the supervision of a qualified member of the faculty. May be repeated to a total of 6 hours. Prerequisite: Consent of department chairman.

## 4983 WRITING INTERNSHIP, 3 hours credit

Field experience in writing under close supervision of a field-based supervisor and professor. May be repeated once. Prerequisites: 12 hours of writing courses not including ENGL 1113 or 1213 and consent of department chair.

## 4992* ENGLISH CAPSTONE, 2 hours credit

Students will (1) write an essay reflecting on how their experiences at Cameron have colored their world view and personal philosophies, (2) compile a portfolio representative of their work as English majors at Cameron, (3) review for and take the Literary History Exam or (if they are on the creative-writing track) do research into the business aspects of the publishing industry, (4) learn about job opportunities and graduate study, (5) develop appropriate career objectives, (6) receive information and guidance in such areas as writing a resume and letters of application and interviewing, and (7) prepare for and take a computer literacy test.

## PROFESSIONAL WRITING COURSES (PRWR)

## 2013* INTRODUCTION TO CREATIVE WRITING, 3 hours credit

A beginning level course for persons interested in writing fiction and/or poetry; especially persons interested in writing literary fiction and poetry such as that written by Ernèst Hemingway, Robert Frost, and Sylvia Plath. Lecture 3 hours. Prerequisite: ENGL 1213 or permission of the department.

## 3003* TECHNIQUES OF FICTION, 3 hours credit

Primarily through close analysis of individual works, the student will gain an understanding of the techniques and conventions of successful contemporary fiction. Lecture 3 hours. Prerequisite: PRFR 2013 or permission of the department.

## 3013* TECHNIQUES OF POETRY, 3 hours credit

Primarily through close analysis of individual works, the student will gain an understanding of the techniques and conventions of successful contemporary poetry. Lecture 3 hours. Prerequisite: PRFR 2013 or permission of the department.

## 3103* CREATIVE WRITING -- THE SHORT STORY, 3 hours credit

A course for persons who want to write short stories, especially those students who want to write literary short stories in the tradition of Ernest Hemingway, Raymond Carver, Joyce Carol Oates, and John Updike. Publishing will be discussed. Lecture 3 hours. May be repeated with different topics to a total of 6 hours. Prerequisite: ENGL 1213 and junior standing or permission of the department.

## 3203* CREATIVE WRITING -- POETRY, 3 hours credit

Practice in traditional patterns as well as original forms of poetry; assigned category-writing, studying, and sharing methods of composing. Lecture 3 hours. May be repeated with different topics to a total of 6 hours. Prerequisites: ENGL 1213 and junior standing or permission of department.

May be repeated with different topics to a total of 6 hours. Prerequisite: ENGL 1213 and junior standing or permission of the department.

## 3403* CREATIVE WRITING -- THE NOVEL, 3 hours credit

A course for persons working on or wanting to start a novel. A particularly helpful course for persons interested in literary novels like those of John Updike and Alice Walker. Lecture 3 hours. May be repeated with different topics to a total of 6 hours. Prerequisites: ENGL 1213 and junior standing or permission of the department.

## 3503* INSPIRATIONAL WRITING, 3 hours credit

Designed for the individual who wants to learn more about writing for today's expanding religious/inspirational market. Areas covered include devotional type material, interviews, inspirational non-fiction, writing the "how to" article, and short fiction. Lecture 3 hours. Prerequisites: ENGL. 1213 and junior standing or permission of the department.

## 3991-3* WRITING WORKSHOP, 1-3 hours credit

Intensive concentration on a special aspect of writing. Focus may vary from semester to semester depending on instructor and students enrolled. May be repeated with different topics to a maximum of 6 hours. Prerequisites: ENGL 1213 and junior standing or permission of department.

## 4003* ON-LINE MAGAZINE WRITING, 3 hours credit

A course for persons wanting to learn to write for on-line magazines. Prerequisite: ENGL 1213 and junior standing or permission of the department.

## 4961-3* DIRECTED WRITING, $1-3$ hours credit

An individualized program of intensive independent writing under the supervision of a qualified member of the faculty. May be repeated to a total of 6 hours. Prerequisites: ENGL 1213 and junior standing or permission of department.

## BACHELOR OF ARTS DEGREE MAJOR IN INTERNATIONAL LANGUAGES (185)

This degree provides students the opportunity to develop language combinations tailored to their interests and career goals. Students choose both a primary and secondary language from options that include Arabic, Chinese, French, German, Italian, Latin, Persian, Russian, Spanish and Swahili. Language electives may be selected from approximately 50 world languages. All course work emphasizes the development of both written and oral language proficiency.
I. GENERAL EDUCATION REQUIREMENT ..... 50 hours General Education requirements are found on the red striped pages.
II. MAJOR ..... 45 hours(21 hours must be upper division)
Primary Language (Arabic, French, German, Latin ..................... . . . 18 hours or Spanish)
Secondary Language (Arabic, Chinese, French, German, ................ 12 hours Italian, Latin, Persian, Russian, Spanish, or Swahili)
Language Elective ..... 12 hours
Linguistics ..... 3 hours
LING 4113 General Linguistics
III. MINOR ..... 18 hours
International Languages majors are strongly urged to consider English, Geography, Political Science, Economics, Marketing, or Management as minors.
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.
BACHELOR OF ARTS DEGREE MAJOR IN ROMANCE LANGUAGES EDUCATION (186)
I. GENERAL EDUCATION REQUIREMENT 50 hours
General Education requirements are found on the red striped pages.
The Romance Languages Education program requires specific courses for meetingGeneral Education requirements in behavioral science and humanities as follows:
Romance Languages Education majors should
(a) Choose PSY 1113 (a prerequisite to EDUC 3733 to meet the Behavioral Sciencerequirement
(b) chouse PHIL 1113 or 2213 as 3 hours of the Humanities requirement(c) choose from ART 1013, ART 2613, ART 2623, THTR 1103, FNAR 1013,MUSC 1013, MUSC 1023, or MUSC 1413 to meet the other 3 hours of theHumanities requirement
II. MAJOR 74 hours
Romance Languages Education majors must complete one of the following program options:
French ..... 41 hours
Required Courses:
FREN 1113, 1223, 2113, 2223, 3113, 3123, 3133, 3143, LING 4i73;Electives: 14 hours of 4000 -level French courses (one course inliterature required)
Required Education Courses ..... 33 hoursEDUC 1800, 3003, *3612, 3673, 3753 (R), 4313 (R), 4653 (R),*4965 (R), *4975 (R); SPED 3103
Spanish ..... 41 hours
Required Courses:
SPAN 1113, 1223, 2113, 2223, 3113, 3213, 3123, 3223, 3133, 3143; LING 4173;
Electives: 8 hours of 4000 -level Spanish courses (one course in literature required.
Required Education Courses 33 hours
EDUC 1800, 3003, *3612, 3673, 3753 (R), 4313 (R), 4653 (R),
*4955 (R), *4985 (R); SPED 3103

* should be taken in the professional semester
(R) Restricted to students admitted to Teacher Education


## III. ELECTIVES TO COMPLETE 124 HOURS REQUIRED FOR GRADUATION

Romance Languages Education candidates must achieve a grade of C or better in all required education courses in order to receive credit toward a degree. If a grade of $D, F$, or $U$ is achieved, the course must be repeated.

## Teacher Licensure/Certification

The student who completes the requirements for this degree and passes the state tests for certification in Spanish or French will be eligible to apply for a standard teaching license.

## ALBANIAN COURSE (ALBN)

## 4153* INTENSIVE STUDIES IN ALBANIAN, 3 hours credit

An intensive study of Albanian, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisites: Study of another foreign language or permission of the department.

## ARABIC COURSES (ARBC)

## 1113* BEGINNING MODERN STANDARD ARABIC I, 3 credit hours

An introductory course in the language and culture of Arabic-speaking countries, Lecture 3 hours.

## 1223* BEGINNING MODERN STANDARD ARABIC II, 3 credit hours <br> Continuation of ARBC 1113. Lecture 3 hours. Prerequisite: ARBC 1113 or equivalent.

## 2113* INTERMEDIATE MODERN STANDARD ARABIC I, 3 credit hours

An intermediate course in the language and culture of the Arabic-speaking countries. Lecture 3 hours.

## 2223* INTERMEDIATE MODERN STANDARD ARABIC II, 3 credit hours <br> Continuation of ARBC 2113. Lecture 3 hours. Prerequisite: ARBC 2113 or the equivalent.

## CATALAN COURSE (CTLN)

## 4153* INTENSIVE STUDIES IN CATALAN, 3 hours credit

An intensive study of Catalan, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisite: Study of another Romance language or permission of the department.

## CHINESE COURSES (CHNS)

## 1113* BEGINNING CHINESE (MANDARIN) I, 3 hours credit

An introductory course in the language and culture of the People's Republic of China. Lecture 3 hours.

## COMANCHE LANGUAGE COURSES (CMCH)

## 1113* COMANCHE LANGUAGE I, 3 hours credit

An introductory course in the language and culture of the Comanche people. Lecture 3 hours. Prerequisite: None.

## CZECH COURSE (CZCH)

## 4153* INTENSIVE STUDIES IN CZECH, 3 hours credit

An intensive study of Czech with the goal of reaching near-native fluency in reading, writing, speaking, and understanding the language. Prerequisite: Study of another foreign language or permission of the department.

## DANISH COURSE (DAN)

## 4153* INTENSIVE STUDIES IN DANISH, 3 hours credit

An intensive study of Danish, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisite: Study of another Germanic language or permission of the department.

## DARI COURSES (DARI)

## 4153* INTENSIVE STUDIES IN DARI I, 3 credit hours

An intensive study of Dari with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisite: Study of another foreign language or permission of the department.

4163* INTENSIVE STUDIES IN DARI II, 3 credit hours
Continuation of DARI 4153. Prerequisite: DARI 4153.

## DUTCH COURSE (DTCH)

## 4153* INTENSIVE STUDIES IN DUTCH, 3 hours credit

An intensive study of Dutch, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisite: Study of another Germanic language or permission of the department.

## ENGLISH AS A SECOND LANGUAGE COURSES (ESL)

## 0103 BASIC ENGLISH, 3 hours credit

Review of the fundamentals of English grammar, standard usage, spelling, and punctuation, including a brief introduction to the basics of writing, with emphasis on individual instruction. Does not satisfy any general education requirement and may not be counted toward a major or minor in English. For students for whom English is a second language. Lecture 3 hours.

## 0113 CONVERSATIONAL ENGLISH, 3 hours credit

Practical instruction in the correct grammatical structures in standard English conversation. Training in verb usage, idiomatic expressions, and situational English. For students for whom English is a second language. Lecture 3 hours.

## 1113* COMPOSITION I, 3 hours credit

Systematic analysis of expository rhetoric and composition with regular practice to develop proficiency in critical thinking, reading, and writing. Satisfies the General Education requirements for students for whom English is a second language. Lecture 3 hours.

## 1213* COMPOSITION II, 3 hours credit

Continued training in composition and introduction to literary appreciation through the study of literary
forms. Satisfies the General Education requirements for students for whom English is a second language. Lecture 3 hours.

## FRENCH COURSES (FREN)

## 1113* BEGINNING FRENCH I, 3 hours credit

An introductory course in the language and culture of French-speaking countries. Lecture 3 hours.

## 1223* BEGINNING FRENCH II, 3 hours credit

Continuation of French 1113. Lecture 3 hours. Prerequisite: FREN 1113 or equivalent.

## 2113* INTERMEDIATE FRENCH I, 3 hours credit

Emphasis is placed on active use of the spoken language. More complex syntactic and grammatical forms are presented. Course taught largely in French. Lecture 3 hours. Prerequisite: FREN 1223 or equivalent.

## 2223* INTERMEDIATE FRENCH II, 3 hours credit

Continuation of French 2113. Lecture 3 hours. Prerequisite: FREN 2113 or the equivalent.

## 3113* FRENCH GRAMMAR AND LINGUISTICS, 3 hours credit

A systematic review of French grammar and the cultivation of facility in reading French newspapers, magazines, and books, with additional emphasis on improving the student's control of spoken French. Lecture 3 hours. Prerequisite: FREN 2223 or equivalent.

## 3123* FRENCH CULTURE, 3 hours credit

A systematic review of French culture. Conducted in French. Lecture: 3 hours. Prerequisite: FREN 2223 or equivalent.

## 3133* FRENCH COMPOSITION, 3 hours credit

A systematic review of French grammar, with a view toward improving the student's control of written French. Conducted in French. Lecture 3 hours. Prerequisites: FREN 2113 and 2223.

## 3143* FRENCH CONVERSATION, 3 hours credit

Total emphasis on improving the student's control of spoken French, with a special emphasis on idiomatic French. Conducted in French. Lecture 3 hours. Prerequisites: FREN 2113 and 2223.

## 4113* L'HISTOIRE DE FRANCE, 3 hours credit

A survey of the important political, social, economic, diplomatic, intellectual, and religious developments in French history. Conducted in French. Lecture 3 hours. Prerequisite: FREN 3143 or equivalent.

## 4123* FRENCH ECRIVAINS PROSODIQUES, 3 hours credit

A course oriented toward the study of major French prose literary works, from the Middle Ages to the present. Relationships between literature and society will also be examined. Conducted in French. Lecture 3 hours. Prerequisite: FREN 4113 or equivalent.

## 4133* FRENCH POETS AND DRAMATISTS, 3 hours credit

A study of the various trends in French poetry and drama. Conducted in French. Lecture 3 hours. Prerequisite: FREN 4123 or equivalent.

## 4143* FRENCH FOR BUSINESS AND INDUSTRY, 3 hours credit

The French language as a means of communication in the world of business; basic commercial and economic vocabulary; trade and advertisement practices. Conducted largely in French. Lecture 3 hours. Prerequisite: FREN 4133 or equivalent.

4961-3* DIRECTED READINGS IN FRENCH, 1 - 3 hours credit
Provides an opportunity for gifted and qualified students to work at a special project not offered in a regular course. May be repeated to a total of 3 hours. Prerequisite: FREN 4143 or equivalent.

## GERMAN COURSES (GERM)

1113* BEGINNING GERMAN I, 3 hours credit
An introductory course in the language and culture of German-speaking countries. Lecture 3 hours.

## 1223* BEGINNING GERMAN II, 3 hours credit

Continuation of German 1113. Lecture 3 hours. Prerequisite: GERM 1113 or equivalent.

## 2113* GERMAN GRAMMAR, 3 hours credit

A systematic review of German grammar and the cultivation of facility in reading German newspapers, magazines, and books, with additional emphasis on improving the student's control of spoken German. Lecture 3 hours. Prerequisite: GERM 1223 or equivalent.

## 2123* GERMAN CULTURE, 3 hours credit

A systematic review of German culture, with additional emphasis on improving the student's control of spoken German. Conducted in German. Lecture 3 hours. Prerequisite: GERM 1223 or equivalent.

## 3113* GERMAN COMPOSITION, 3 hours credit

A systematic review of German grammar, with a view toward improving the student's control of written German. Conducted in German. Lecture 3 hours. Prerequisite: GERM 2123 or equivalent.

## 3123* GERMAN CONVERSATION, 3 hours credit

Total emphasis on improving the student's control of spoken German, with a special emphasis on idiomatic German. Conducted in German. Lecture 3 hours. Prerequisite: GERM 3113 or equivalent.

## 4961-3* DIRECTED READINGS IN GERMAN, 1 -3 hours credit

Provides an opportunity for gifted and qualified students to work at a special project not offered in a regular course. May be repeated to a total of 3 hours. Prerequisite: GERM 3123 or equivalent.

## INDONESIAN COURSES (INDN)

4153* INTENSIVE STUDIES IN INDONESIAN I, 3 hours credit An intensive study of Indonesian, with the goal of reaching near-native Stice. Lecture 3 . Prerequisite: Study of another foreign language or permission of the department.

4163* INTENSIVE STUDIES IN INDONESIAN II, 3 hours credit
Continuation of Indonesian I. Lecture 3 hours. Prerequisite: INDN 4153.

## ITALIAN COURSES (ITAL)

## 1113* BEGINNING ITALIAN I, 3 hours credit

An introd and ourse in the language and culture of Italy and otheaking areas. Lecture 3 hours.

## 1223* BEGINNING ITALIAN II, 3 hours credit

Continuation of Italian 1113. Lecture 3 hours. Prerequisite: ITAL 1113 or equivalent.

## 2113 INTERMEDIATE ITALIAN I, 3 hours credit

An intermediate-level course in the Italian language. A review of grammar, writing, and speaking. Conducted in Italian. Lecture 3 hours, Prerequisite: ITAL 1223.

2223 INTERMEDIATE ITALIAN II, 3 hours credit
Continuation of ITAL 2113. Conducted in Italian. Lecture 3 hours. Prerequisite: ITAL 2113 or the equivalent.

## 4961-3* DIRECTED READINGS IN ITALIAN, $1-3$ hours credit

Provides an opportunity for gifted and qualified students to work at a special project not offered in a regular course. May be repeated to a total of 6 hours. Prerequisite: ITAL 2223 or equivalent.

## LATIN COURSES (LATN)

## 1113* BEGINNING LATIN I, 3 hours credit

An introductory course in understanding, speaking, reading, and writing Latin. Lecture: 3 hours.

## 1223* BEGINNING LATIN II, 3 hours credit <br> Continuation of LATN 1113. Lecture 3 hours. Prerequisite: LATN 1113 or equivalent.

## 2113* INTERMEDIATE LATIN I, 3 hours credit

An intermediate-level course in Latin. A review of grammar, writing, and speaking. Lecture 3 hours. Prerequisite: LATN 1223 or equivalent.

2223* INTERMEDIATE LATIN II, 3 hours credit
Continuation of LATN 2113. Lecture 3 hours. Prerequisite: LATN 2113 or equivalent.

## 4171-3* SPECIAL TOPICS IN LATIN, 1-3 hours credit

Directed individual or group study of selected topics or problems in Latin. Areas of study will vary from semester to semester. This course may be repeated to a total of 6 hours with departmental permission. Does not count toward a major in International Languages.

## 4961-3* DIRECTED READINGS IN LATIN, $\boldsymbol{1}-3$ hours credit

Intensive independent readings and research on a selected topic, writer, or movement in literature or the Latin language under supervision of faculty member. May be repeated to a total of 6 hours with departmental permission. Prerequisite: LATN 2223 or equivalent.

## LINGUISTICS COURSES (LING)

## 4113* GENERAL LINGUISTICS, 3 hours credit

A systematic review of linguistics to include grammar, phonology, morphology, syntax, and sematics of world languages. Prerequisites: 6 hours English Composition , 3 hours foreign language or permission of instructor.

## 4163 TEACHING ENGLISH AS A SECOND LANGUAGE: THEORY AND METHODS, 3 hours credit

Introduction to theories of language acquisition and methods of instruction; practicum in applications of theories and methods. Prerequisites: 6 hours English Composition, 3 hours foreign language or permission of instructor.

## 4173 TEACHING FOREIGN LANGUAGES: THEORY AND METHODS, 3 hours credit

An introduction to methods and materials in teaching elementary and secondary foreign languages. Lecture 2 hours, laboratory 2 hours. Teacher Certification students must be admitted to teacher education prior to enrollment in this course.

## 4181-3* SPECIAL TOPICS IN LINGUISTICS, 1 - 3 hours credit

Directed individual or group study of selected topics or problem areas in linguistics. Areas of study will vary from semester to semester. This course may be repeated up to a total of 6 hours credit with departmental permission. Prerequisites: 6 hours ENGL COMP, 3 hours foreign language or permission of instructor.

## NORWEGIAN COURSE (NORW)

## 4153* INTENSIVE STUDIES IN NORWEGIAN, 3 hours credit

An intensive study of Norwegian, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisite: Study of another Germanic language or permission of the department.

## PASHTO COURSES (PHTO)

## 4153* INTENSIVE STUDIES IN PASHTO I, 3 credit hours

An intensive study of Pashto, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisite: Study of another foreign language or permission of the department.

## 4163* INTENSIVE STUDIES IN PASHTO II, 3 credit hours <br> Continuation of PHTO 4153. Prerequisite: PHTO 4153.

## PERSIAN (FARSI) COURSES (PRSN)

1113* BEGINNING PERSIAN (FARSI) I, 3 credit hours
An introductory course in the language and cultures of Iran and Afghanistan. Lecture 3 hours.

## 1223* BEGINNING PERSIAN (FARSI) II, 3 credit hours

Continuation of PRSN 1113. Lecture 3 hours. Prerequisite: PRSN 1113 or the equivalent.

## POLISH COURSE (PLSH)

4153* INTENSIVE STUDIES IN POLISH, 3 hours credit
An intensive study of Polish with the goal of reaching near-native fluency in reading, writing, speaking, and understanding the language. Prerequisite: Study of another foreign language or permission of the department.

## PORTUGUESE COURSES (PORT)

## 4153* INTENSIVE STUDIES IN PORTUGUESE, 3 hours credit

An intensive study of Portuguese, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisite: Study of another Romance language or permission of the department.

## 4961-3* DIRECTED READINGS IN PORTUGUESE, 3 hours credit

Provides an opportunity for gifted and qualified students to work at a special project not offered in a regular course. May be repeated to a total of 3 hours. Prerequisite: PORT 4153.

## ROMANIAN COURSES (ROMN)

## 4153* INTENSIVE STUDIES IN ROMANIAN, 3 hours credit

An intensive study of Romanian, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisite: Study of another Romance language or permission of the department.

4961-3* DIRECTED READINGS IN ROMANIAN, 3 hours credit
Provides an opportunity for gifted and qualified students to work at a special project not offered in a regular course. May be repeated to a total of 3 hours. Prerequisite: ROMN 4153.

## RUSSIAN COURSES (RUSN)

## 1113* BEGINNING RUSSIAN I, 3 credit hours

An introductory course in the language and culture of the Russian Federation. Lecture 3 hours.

## 1223* BEGINNING RUSSIAN II, 3 credit hours

Continuation of RUSN 1113. Lecture 3 hours. Prerequisite: RUSN 1113 or the equivalent.

## 4961-3 DIRECTED READINGS IN RUSSIAN, 1 - $\mathbf{3}$ hours credit

This course provides an opportunity for gifted and qualified students of Russian to work with an instructor on individualized topics in Russian language, linguistics, and literature. Course may be repeated to a total of six hours with departmental permission. Prerequisite: RUSN 1223 or equivalent.

## SOMALI COURSES (SMLI)

## 4153* INTENSIVE STUDIES IN SOMALI I, 3 credit hours

An intensive study of Somali, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisite: Study of another foreign language or permission of the department.

## 4163* INTENSIVE STUDIES IN SOMALI II, 3 credit hours

Continuation of SMLI 4153. Prerequisite: SMLI 4153.

## SPANISH COURSES (SPAN)

## 1113* BEGINNING SPANISH I, 3 hours credit

An introductory course in the language and culture of Spanish-speaking countries. Lecture 3 hours.

## 1223* BEGINNING SPANISH II, 3 hours credit

Continuation of SPAN 1113. Lecture 3 hours. Prerequisite: SPAN 1113 or equivalent.

## 2113* INTERMEDIATE SPANISH I, 3 hours credit

An intermediate-level course in the Spanish language. A review of grammar, writing, and speaking. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 1223 or the equivalent.

## 2223* INTERMEDIATE SPANISH II, 3 hours credit

Continuation of SPAN 2113. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 2113.

## 3113* SPANISH GRAMMAR AND LINGUISTICS, 3 hours credit

A systematic review of Spanish grammar; a study of the phonology, morphology, syntax, and semantics of modern standard Spanish. Lecture 3 hours. Prerequisite: SPAN 2223 or equivalent.

## 3123* SPANISH CONVERSATION, 3 hours credit

Improving accent and rapidity of speech through speeches, presentations, impromptu dialogues. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 2223 or equivalent.

## 3133* SPANISH CULTURE, 3 hours credit

A systematic review of the cultures of the Spanish-speaking world, with additional emphasis on improving the student's control of spoken Spanish. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 3113 and SPAN 3123 or equivalent.

## 3143* SPANISH COMPOSITION, 3 hours credit

Cultivation of facility in writing Spanish. Planned and impromptu compositions. Lecture 3 hours. Prerequisite: SPAN 3113 and SPAN 3123 or equivalent.

## 3213 ADVANCED SPANISH GRAMMAR AND LINGUISTICS, 3 hours credit

An expansion and refinement of complex structures including nuances of the language not addressed in SPAN 3113 which may include archaic and literary tenses, special verb forms for indirect discourse, infrequently used compound tenses, advanced vocabulary, and expanded use of the subjunctive mood. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 3113 or equivalent.

## 3223 ADVANCED SPANISH CONVERSATION, 3 hours credit

Provides additional training in oral mastery of the Spanish language. Focuses on the automation of spoken language in all tenses/moods. Aims to achieve command of idiomatic expressions and advanced vocabulary. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 3123 or equivalent.

## 4113* LA HISTORIA DEL MUNDO HISPANICO, 3 hours credit

A survey of the important political, social, economic, diplomatic, intellectual, and religious developments in the Spanish speaking world. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 3143 or equivalent.

## 4123* ESPANA EN SU LITERATURA I, 3 hours credit

The study of the major literary works of Spain from the Middle Ages through the 17th Century. Relationships between literature and society will also be examined. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 4113 or equivalent.

## 4133* ESPANA EN SU LITERATURA II, 3 hours credit

The study of the major literary works of Spain from the 18 th Century to the present. Relationships between literature and society will also be examined. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 4123 or equivalent.

## 4143* HISPANOAMERICA EN SU LITERATURA I, 3 hours credit

The study of the major literary works of Spanish America from pre-colonial literature to the first half of the 19th Century. Relationships between literature and society will be discussed. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 4113 or equivalent.

## 4153* HISPANOAMERICA EN SU LITERATURA II, 3 hours credit

The study of the major literary works of Spanish America from the second half of the 19th Century to the present. Relationships between literature and society will be discussed. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 4143 or equivalent.

## 4163* SPANISH FOR BUSINESS AND INDUSTRY, 3 hours credit

The Spanish language as a means of communication in the world of business; basic commercial and economic vocabulary; trade and advertisement practices. Lecture 3 hours.

## 4961-3* DIRECTED READING IN SPANISH, $1-3$ hours credit

This course provides an opportunity for gifted and qualified students to work at a special project not offered in a regular course. May be repeated to a total of 3 hours. Prerequisite: SPAN 4143 or equivalent.

## SWAHILI COURSES (SWLI)

## 1113* BEGINNING SWAHILI I, 3 credit hours

An introductory course in the major language and the cultures of East Africa. Lecture 3 hours.

## 1223* BEGINNING SWAHILI II 3 credit hours

Continuation of SWLI 1113. Lecture 3 hours. Prerequisite: SWLI 1113 or the equivalent.

## SWEDISH COURSE (SWED)

## 4153* INTENSIVE STUDIES IN SWEDISH, 3 hours credit

An intensive study of Swedish, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Prerequisite: Study of another Germanic language or permission of the department.

## TURKISH COURSES (TURK)

## 4153* INTENSIVE STUDIES IN TURKISH I, 3 hours credit

An intensive study of Turkish with the goal of reaching near-native fluency in reading, writing, speaking, and understanding the language. Prerequisite: Study of another foreign language or permission of the department.

4163* INTENSIVE STUDIES IN TURKISH II, 3 hours credit Continuation of TURKISH 4153. Prerequisite: TURK 4153.

[^7]
## DEPARTMENT OF <br> History and government

## CHAIR - Richard Voeltz, Professor

Professors: Crawford, Miller, Soelle, Stegmaier, Voeltz
Associate Professor: Davis, L. Janda, S. Janda, Caterall
Assistant Professor: Graves, Huckaby, Johnson, Wohlers
The Department of History and Government offers a program leading to a Bachelor of Arts degree with a major in History and a Bachelor of Arts degree with a major in Political Science. The department advises students about minors in ethnic studies, humanities, geography, philosophy, and museum studies.

The Department of History and Government provides several courses which meet general education requirements for all students. It also provides more specialized upper-level courses for those wishing to pursue careers related to history and political science. Such education prepares students for graduate study and careers in teaching, law, military service, and other professions.

## BACHELOR OF ARTS DEGREE MAJOR IN HISTORY (130)

Historians study, assess, and interpret the past in a spirit of critical inquiry as they try to determine not only what happened, but the causes and effects of past events. The study of history can provide a student with a broader perspective about past events and a deeper understanding of present conditions.

1. GENERAL EDUCATION REQUIREMENT ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... 42 hours
Required Courses 15 hoursHIST 1113, HIST 1123, HIST 1483 or HIST 1493 (in additionto the course taken to meet the general education requirement),HIST 2133, HIST 4793
Electives ..... 27 hours(Chosen from each of the following areas with the approvalof the department.)
2. U.S. history courses ( 12 hours)
3. Non-US history courses ( 15 hours). Six of those hours mustconsist of HIST 2113 and HIST 2223.
III. MINOR ..... 18 hours
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.
V. Students must achieve a grade of C or better in HIST 2133 and HIST 4793 to graduate.
VI. Required assessment exam taken prior to graduation.

## BACHELOR OF ARTS DEGREE MAJOR IN POLITICAL SCIENCE (162)

Political Science is the study of governments, their philosophical and constitutional foundations, institutional structures, processes, interrelations, and policies. An understanding of political science leads to an appreciation of the complexity of political life and the roles of citizens in it. The Political Science Program provides courses which serve the needs of the general student as well as those students seeking a broad liberal education, preparing for graduate study in political science, or preparing for law school.
I. GENERAL EDUCATION REQUIREMENT ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... 36 hours
Required Courses 6 hours
PS 2113, PS 2793At least three hours in each of the following five areas; the remainingfifteen hours may be selected from any or all of the areas (Note:PS 2001-3 may be taken for a maximum of 6 hours)30 hours
Political TheoryPS 2001-3, PS 2613, PS 3613, PS 3633, PS 4491-3, PS 4591-3,PS 4613, PS 4673
Institutions and Processes
PS 2001-3, PS 2023, PS 3003, PS 3483, PS 3513, PS 3753, PS 3813,PS 4043, PS 4253, PS 4491-3, PS 4591-3
Politics and BehaviorPS 2001-3, PS 2713, PS 3013, PS 3023, PS 3043, PS 3113, PS 3723,PS 4491-3, PS 4591-3
International Relations
PS 2001-3, PS 3213, PS 3223, PS 4053, PS 4491-3, PS 4591-3
Comparative Government
PS 2001-3, PS 3333, PS 4023, PS 4043, PS 4491-3, PS 4591-3
NOTE: Students may take selected cognate courses with advisor approval to meet majorrequirements. Cognate courses used to fulfill Pol. Sci. Major requirements may not be used to meetMinor requirements.
III. MINOR18 hours
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION. Please Note: A student must complete at least 40 hours of upper division courses.
V. Required assessment exam taken prior to graduation.

## BACHELOR OF ARTS DEGREE MAJOR IN SOCIAL STUDIES EDUCATION (135)

The Bachelor of Arts in Social Studies Education degree program offers coursework in preparation for teaching social studies at the 7-12 grade level in the state of Oklahoma. Specific courses required for the major include 39 hours of major core courses, 33 hours of education courses, and 51-52 hours of general education courses, of which 24 hours are required social studies content-area courses. Thus, 63 hours of social studies coursework are required as major core courses and general education courses, with 36 total hours of history, 6 hours of political science, 6 hours of economics, 6 hours of geography, 3 hours of psychology, 3 hours of sociology, and an additional 3-hour social studies elective.

Students interested in the Social Studies Education degree should consult as early as possible with the program advisor in the Department of History and Government to ensure that the proper sequence of coursework is taken to complete the degree within 124 hours.

## I. GENERAL EDUCATION REQUIREMENT 51-52 hours General Education requirements are found on the red striped pages.

The Social Studies Education program requires specific courses for meeting General Education requirements as follows:

## Required Courses

ENGL 1113, ENGL 1213, COMM 1113, MATH 1513 or above, BIOL 1004 or 1364, ESCI 1135 or GEOL 1014, HIST 1483*, PS 1113*, Humanities (6 hours)
HIST 1113 (required)*, one additional non-history humanities course, PSY 1113*, ECON 2013*, Physical Education activities (4 hours) or Military Science (8 hours)

## Electives

Sufficient to total 50 hours with no more than 6 hours in any one department HIST 2113*, HIST 2223*, SOCI 1113*, (ANTH 1113 recommended-not required)
*Required additional core courses to supplement the major
II. MAJOR CORE COURSES

39 hours


Political Science
3 hours
Political Science Elective (select one)
PS 2023, PS 2113, PS 3003, PS 3213
Economics .............................................................. . . 3 hours
Economics Elective (select one)
ECON 2023, GEOG 3023
Geography ..... 6 hoursGEOG 2243, GEOG 3213

## Social Studies

Social Studies Elective (3 hours). Choose an additional 3000+ course
in PS, GEOG, ECON, or SOCI


* Courses taken in the professional semester.
(R) Restricted to students admitted to Teacher Education.


## IV. ELECTIVES (IF NEEDED) REQUIRED TO COMPLETE 124 HOURS FOR GRADUATION

Social Studies Education candidates must achieve a grade of C or better in all major core courses and required education courses in order to receive credit toward a degree. If a grade of $\mathrm{D}, \mathrm{F}$, or U is achieved, the course must be repeated.

Social Studies Education candidates must demonstrate foreign language proficiency (listening and speaking) at the novice-high level as defined by the American Council on the Teaching of Foreign Languages proficiency test or by taking a foreign language course.

## Teacher Licensure/Certification

The student who completes the requirements for this degree and passes the state tests for certification in U.S. History/Oklahoma History/U.S. Government/Economics, World History/Geography, and/or Psychology/ Sociology will be eligible to apply for a standard teaching license.

## GEOGRAPHY COURSES (GEOG)

## 2013* PHYSICAL GEOGRAPHY, 3 hours credit

A basic introduction to the physical elements of the earth as they relate to man. The influence of such factors as soils and minerals, landforms and hydrography, vegetation, weather, and climate are emphasized. Lecture 3 hours.

## 2243* HUMAN GEOGRAPHY, 3 hours credit

The principles of geography in its human aspects and its relationship to the cultural patterns of the world. Lecture 3 hours.

## 3023* ECONOMIC GEOGRAPHY, 3 hours credit

A study of the resource base and economic activities with emphasis on production, distribution, and consumption of various types of commodities of the world. Lecture 3 hours.

## 3033* HISTORICAL GEOGRAPHY OF THE UNITED STATES, 3 hours credit

Geographic environment of America and its influence on the historical evolution of the United States. Lecture 3 hours.

## 3213* WORLD REGIONAL GEOGRAPHY, 3 hours credit

Comparative study of the world's major geographic regions as defined by interrelated complexes of physiographic and cultural elements. Lecture 3 hours.

## 3243* ETHNIC GEOGRAPHY OF THE UNITED STATES, 3 hours credit

A study of the geographic origins of individual groups and of the impact of migration upon their cultural traditions and ways of life. Lecture 3 hours.

## 3253* CONSERVATION OF NATURAL RESOURCES, 3 hours credit

A study of America's resources, their geographic localization, and the nature and problems of their uses and misuses. Lecture 3 hours.

## 3401-3* SELECTED TOPICS IN GEOGRAPHY, $1-3$ hours credit

An intensive analysis of a selected problem or topic in geography. May be repeated with a different topic for additional credit. Prerequisite: Permission of instructor.

## HISTORY COURSES (HIST)

## 1113* EARLY WORLD CIVILIZATION, 3 hours credit

Survey of the major civilizations of the world from the earliest times to 1650 . Lecture 3 hours.

## 1123* MODERN WORLD CIVILIZATION, 3 hours credit

Survey of the major civilizations of the world from 1650 to the present. Lecture 3 hours.

## 1483* UNITED STATES HISTORY TO 1865, 3 hours credit

Introductory survey from European backgrounds through the Civil War. Lecture 3 hours. Prerequisite: Eligibility for ENGL 1113.

## 1493* UNITED STATES HISTORY SINCE 1865, 3 hours credit

A survey of the development of the United States from 1865 to the present. Lecture 3 hours. Prerequisite: Eligibility for ENGL 1113.

## 2113* WESTERN CIVILIZATION I, 3 hours credit

Using an interdisciplinary approach that incorporates materials chiefly from history but also from philosophy, art, and music, this course will provide the student a firm grounding in the History of Europe, including the history of those regions that influenced it such as northern Africa, the Middle East, and the Near East.

## 2133* AN INTRODUCTION TO HISTORICAL RESEARCH AND WRITING, 3 hours credit

An introduction to the research methods used in history, with emphasis on the gathering and evaluation of evidence, the organization and interpretation of such evidence, and the effective presentation of this research. Lecture 3 hours. Prerequisite: ENGL 1213.

## 2223* WESTERN CIVILIZATION II, 3 hours credit

Using an interdisciplinary approach that incorporates material chiefly from history but also from philosophy, art, and music, this course will provide the student a firm grounding in the History of Europe from the Renaissance to the present.

## 3003* AMERICAN HISTORY THROUGH FILM, $\mathbf{3}$ hours credit

This course will provide a broad overview of American history using films as vehicles for in-depth examination and discussion of important eras, people, and events. Students will watch and discuss films in class, conduct research into the making of each film and its historical accuracy, and write interpretive research papers on broad historical themes discussed in class. Lecture 3 hours. Prerequisite: HIST 1483 or HIST 1493.

## 3013* HISTORY OF RELIGION IN AMERICA, 3 hours credit

An examination of religious ideas, movements, and institutions in American history with emphasis on those most influential in shaping American society. Lecture 3 hours. Prerequisite; HIST 1483 or HIST 1493, HIST 2133 or departmental permission.

## 3023* MODERN LATIN AMERICA, 3 hours credit

A historical analysis of the forces which have shaped Latin America from the early 19th century to the present. Special attention is devoted to the revolutionary process, with Mexico and Cuba as case studies. Lecture 3 hours. Prerequisite: HIST 2133 or departmental permission.

## 3033* THE ATLANTIC WORLD, $1400-1850,3$ hours credit

This course examines the relationships which developed among Africa, the Americas and Europe between 1400 and 1850. Students will examine European exploration and colonization, African state-building and the Atlantic slave trade, and the destruction of old and the creation of new American societies and cultures. Lecture 3 hours. Prerequisites: HIST 1123, HIST 2133 or departmental permission.

3043* OKLAHOMA HISTORY, 3 hours credit
A survey of the development of Oklahoma from the time of the discovery of America to the present. Lecture 3 hours.

## 3053* HISTORICAL GEOGRAPHY OF THE UNITED STATES, 3 hours credit

Geographic environment of America and its influence on the historical evolution of the United States. Lecture 3 hours.

## 3113* THE TRANS-MISSISSIPPI WEST, 3 hours credit

Development of the Trans-Mississippi and Far Western frontiers, with special attention to the Southwest, exploration, the fur trade, Indian relations, overland migration, transportation, territorial acquisitions, mining and cattle frontiers, and the agrarian revolt. Lecture 3 hours. Prerequisites: HIST 1483, HIST 1493, HIST 2133 or departmental permission.

## 3133* AMERICAN MILITARY HISTORY, 3 hours credit

A survey of American military history from American Revolution to the present. Lecture 3 hours.

## 3143* MODERN FAR EAST, 3 hours credit

The institutional background and the impact of the occidental world on the East from the early nineteenth century. Problems of modern China and Japan, and their relations with the West, especially the United States. Lecture 3 hours.

## 3233* BRITAIN TO 1689, 3 hours credit

The British people in their political, social, and institutional development from earliest times through the Glorious Revolution. Lecture 3 hours. Prerequisite: HIST 2133 or departmental permission.

## 3243* BRITAIN SINCE 1689, 3 hours credit

Emergence of cabinet government, the Industrial Revolution, the Napoleonic era and empire problems, and the development of Britain to the present. Lecture 3 hours. Prerequisite: HIST 2133 or departmental permission.

## 3333* THE AMERICAN INDIAN, 3 hours credit

A history of Native American peoples from pre-Columbian times to the contemporary period. Emphasis on tribal culture, the impact of European contact, and the evolution of governmental Indian policy. Lecture 3 hours. Prerequisite: HIST 1483 or HIST 1493, HIST 2133 or departmental permission.

## 3343* HISTORY OF THE PLAINS INDIANS, 3 hours credit

A study of the Plains Indians, their origins, migrations, social and cultural development, and the impact of European contact and United States Indian policies. Lecture 3 hours. Prerequisite: HIST 1483 or 1493, HIST 2133 or departmental permission.

## 3353* AFRICAN-AMERICAN HISTORY, 3 hours credit

A study of African-American history from the development of the slave trade through emancipation and up to the present time. Emphasis is placed upon the influence of African-Americans in the history of the United States. Lecture 3 hours. Prerequisite: HIST 1483, HIST 1493, HIST 2133 or departmental permission.

## 3363* EUROPE AND THE MEDITERRANEAN, 1200-1750, 3 hours credit

During the period from 1200-1750, Europe and the Mediterranean shared in a variety of social, cultural, political, and economic exchanges. This course traces the development of these complex relationships with
an emphasis on Southern Europe and its interactions with other Mediterranean societies. Prerequisite: HIST 2133, HIST 2223 or departmental permission.

## 3373* THE ANTEBELLUM SOUTH, 3 hours credit

Cultural, economic, and social history of the South from colonial times to the Civil War. Lecture 3 hours. Prerequisite: HIST 1483, HIST 2133 or departmental permission..

## 3383* THE NEW SOUTH, 3 hours credit

The political, economic, and social development of the American South from 1865 to the present, with particular attention to the problems arising from changes in agriculture, the beginnings of industry, and the relations between the races. Lecture 3 hours. Prerequisite: HIST 1493, HIST 2133 or departmental permission.

## 3391-3* INDEPENDENT STUDY, 1 -3 hours credit

Intensive independent readings or study on definite problems or special historical subjects, based upon pre-approved outlines or plans, with regular conferences and with written and/or oral reports required. Prerequisites.: 18 hours of history and permission of instructor. May be repeated with a different topic for a total of 6 hours credit.

## 4033* AMERICAN DIPLOMATIC HISTORY TO 1900, 3 hours credit

A survey of American foreign policy from the War for Independence to 1900, with emphasis on the efforts of the United States government to obtain recognition from the Continental European States, to protect and expand foreign trade, to defend neutral rights, and to maintain peace. Lecture 3 hours. Prerequisites: HIST 1483, HIST 1493, HIST 2133 or departmental permission.

## 4043* AMERICAN DIPLOMATIC HISTORY SINCE 1900, 3 hours credit

A survey of American foreign policy from the end of the Spanish-American War to the present, with emphasis on the emergence of the United States as a world power, the involvement of the United States in World Wars One and Two, the attempt to establish and maintain world peace and peace keeping organizations, and the place of the United States in an interdependent world. Lecture 3 hours. Prerequisite: HIST 1493, HIST 2133 or departmental permission.

## 4113* AMERICAN WOMEN: 1620-1890, 3 hours credit

A study of women's lives from the Colonial Period to the Post Civil War Era, with emphasis on the socio-economics and political status of American women and the changes that women have experienced in their public and private roles. Lecture 3 hours. Prerequisite: HIST 1483, HIST 2133 or departmental permission.

## 4123* AMERICAN WOMEN: 1890-PRESENT, 3 hours credit

A study of the changing socio-economic and political roles of American women and the relationship between women and society, with emphasis on the development of new values, attitudes, and behavior for women and the impact that emerging value structures have had on social organizations. Lecture 3 hours. Prerequisite: HIST 1493, HIST 2133 or departmental permission.

## 4243* AMERICAN COLONIAL HISTORY, 3 hours credit

The political, economic, social, and cultural history of the colonies in North America from the earliest settlements to the preliminaries of the great war for empire. The modification of European institutions and ideals in the New World. Lecture 3 hours. Prerequisite: HIST 1483, HIST 2133 or departmental permission.

## 4253* REVOLUTIONARY AMERICA, 1754-1783, 3 hours credit

The French and Indian War; the British imperial system; the causes and immediate consequences of the War for American Independence. Lecture 3 hours. Prerequisite: HIST 1483, HIST 2133 or departmental permission.

4263* THE EARLY NATIONAL PERIOD IN THE UNITED STATES, 3 hours credit
The drafting and adoption of the federal constitution and the organization of a new national government. The origin and development of political parties; the conflict between nationalism and sectionalism; foreign policy and territorial expansion in the period from 1783 to 1824 . Lecture 3 hours. Prerequisite: HIST 1483, HIST 2133 or departmental permission.

## 4273* THE AGE OF JACKSON AND AMERICAN EXPANSION, 1824-1861, 3 hours credit

A political history of the period between 1824 and 1861. The impact of nationalism, liberalism, and sectionalism upon American life in the middle period. Lecture 3 hours. Prerequisite: HIST 1483, HIST 2133 or departmental permission.

## 4283* CIVIL WAR IN AMERICA, 3 hours credit

The political, military, diplomatic, economic, and social problems encountered by the Union and the Confederacy; leading personalities and events of the war between the states. Lecture 3 hours. Prerequisite: HIST 1483, HIST 2133 or departmental permission.

## 4293* RECONSTRUCTION AND THE GILDED AGE, 3 hours credit

An intensive study of the major economic, political, and social changes in the United States in the aftermath of the Civil War, with emphasis on the processes and problems of reconstruction in the southern states, and with special attention to the rise of modern industrialism and to the organization of labor and the farmers. Lecture 3 hours. Prerequisite: HIST 1493, HIST 2133 or departmental permission.

## 4303* UNITED STATES AS AN EMERGING WORLD POWER, 3 hours credit

Studies the coming of age of the United States as an industrial giant and a major force in international politics. Covers socioeconomic, political changes within the nation and foreign policy developments from 1890 to 1920 including the creation of a national urban culture, presidencies of William McKinley, Theodore Roosevelt, and Woodrow Wilson, the Spanish-American War and The First World War. Prerequisite: HIST 1493, HIST 2133 or departmental permission.

## 4313* AMERICA BETWEEN THE WORLD WARS, 3 hours credit

The United States in the Age of the Great Depression, with primary stress on social problems and popular movements of the 1920s, New Deal policies of Franklin D. Roosevelt and circumstances under which the nation became involved in World War II. Lecture 3 hours. Prerequisite: HIST 1493, HIST 2133 or departmental permission.

## 4323* AMERICA, 1945-PRESENT, 3 hours credit

A study of the political, economic, social, cultural and diplomatic changes in America since 1945. Topics include civil rights, the Cold War, consumerism, social change, and others. Lecture/discussion 3 hours. Prerequisite: HIST 1493, HIST 2133 or departmental permission.

## 4343* THE AMERICAN SOUTHWEST, 3 hours credit

The Southwest from the time of Spanish exploration and colonization to the $20^{\text {th }}$ Century. Topics include Native American societies, the Spanish Southwest, the Southwest under the Republic of Mexico, and U.S. occupation following the Mexican War. Topics include immigration, urbanization, the federal presence, popular culture and the Sunbelt phenomenon. Lecture 3 hours, Prerequisite: HIST 1483, HIST 1493, HIST 2133 or departmental permission.

## 4353* NORTHERN EUROPE, 1300-1800, 3 hours credit

This course focuses on the major cultural, social, political and economic developments in those European cultures bordering on the Baltic Sea and the North Sea, with particular emphasis on the British Isles, northern Germany, Sweden, Poland, and the Low Countries. Lecture 3 hours. Prerequisite: HIST 2223, HIST 2133 or departmental permission.

## 4363* FRENCH REVOLUTION AND NAPOLEONIC ERA, 3 hours credit

The period of the French Revolution and Napoleon including the origins of the Revolution, the course of its development, the rise of Napoleon, the Napoleonic wars and their effect on Europe. Lecture 3 hours. Prerequisite: HIST 2223 , HIST 2133 or departmental permission.

## 4373* HISTORY OF EUROPE, 1815-1870, 3 hours credit

Europe at the end of the Napoleonic Era; the Congress of Vienna and the Congress system; the revolutions of 1830 and 1848; the unification of Italy and Germany. Lecture 3 hours. Prerequisite: HIST 2223, HIST 2133 or departmental permission.

## 4383* HISTORY OF EUROPE, 1870-1918, 3 hours credit

The growth of alliances, economic and political imperialism; World War I and its origin. Lecture 3 hours. Prerequisite: HIST 2223, HIST 2123 or departmental permission.

## 4403* EUROPE'S ENLIGHTENMENTS, 1648-1789, 3 hours credit

The growth of divine-right monarchy in Europe and the balance of power; the rationalists and the age of Enlightenment. Lecture 3 hours. Prerequisite: HIST 2223, HIST 2133 or departmental permission.

## 4413* THE REFORMATION, 3 hours credit

This course will address church and society in later medieval Europe, including the rise of lay piety and the crisis in church governance; the Protestant challenge to the universal church and the Catholic and Protestant reform movements; the rise of confessionalization, the territorial state, and social and cultural transformation; and the Thirty Years' War. Prerequisite: HIST 2113, 2223 or departmental permission.

## 4433* RUSSIA TO 1815,3 hours credit

A survey of the political, institutional, societal, and economic development of Russia from the Kievan period to the end of the Napoleonic Wars. The course will include the origins of Russian society, the rise of Muscovy, the growth of the Russian Empire, origins and development of autocracy and serfdom, and Russia's emergence as a great power. Lecture 3 hours. Prerequisite: HIST 2113, HIST 2133 or departmental permission.

## 4443* RECENT EUROPEAN HISTORY, 3 hours credit

The quest for security in the 1920's, the rise of the dictators, and the road to war. World War II and its aftermath. Lecture 3 hours. Prerequisite: HIST 2223, HIST 2133 or departmental permission.

## 4453* MODERN RUSSIA 1815-PRESENT, 3 hours credit

Europe after the Napoleonic Wars, Russia in the nineteenth century, the nature of the old regime, the emergence of the underground movement, revolutionary literature, the revolutions of 1917, Communist Russia, and post-Communist Russia. Lecture 3 hours. Prerequisite: HIST 2223, HIST 2133 or departmental permission.

## 4473* MODERN GERMANY, 1815-PRESENT, 3 hours credit

A study of the political, institutional, societal and economic development of Germany from the end of the Napoleonic Era to the present including German Unification, World War I, the rise of Hitler, World War II, and Germany's post-war recovery. Lecture 3 hours. Prerequisites: HIST 2223, HIST 2133 or departmental permission.

## 4483* DIPLOMATIC HISTORY OF MODERN EUROPE, 3 hours credit

A discussion and analysis of the major personalities, events and trends in European diplomacy from the post Napoleonic settlement into the Atomic Age. Attention will be focused primarily upon the major nations of Western Europe. Russia, the Balkan states, and the area of Eastern Europe will be treated only in so far as they interact with the Western European powers. Lecture 3 hours. Prerequisite: History 2223, HIST 2133 or departmental permission.

## 4773 METHODS OF TEACHING SOCIAL STUDIES, 3 hours credit

Problems and methods of teaching social studies. Lecture 3 hours. Teacher Certification students must be admitted to teacher education prior to enrollment in this course. Prerequisite: Departmental approval. Offered fall semester only.

## 4793 SENIOR SEMINAR IN HISTORY, 3 hours credit

An intensive study of a historical event or person and the historiography concerning that event or person. Research to gather and evaluate historical facts and interpretations, the organization of this information, and a formal oral and written presentation of the results of the research are required. A formal research paper is required. Prerequisites: 18 hours of history including HIST 2133, and permission of instructor.

## 4961-3* SELECTED TOPICS IN HISTORY, $1-3$ hours credit

An intensive analysis of a selected problem or topic in history. May be repeated, with a different topic, for additional credit. Prerequisites: 18 hours of history and permission of instructor.

## HUMANITIES COURSES (HUM)

## 2513* HUMANITIES OF THE GREAT PLAINS, 3 hours credit

An interdisciplinary approach to the unique environment and the resultant cultural developments in art, geography, history, literature, and music of the Great Plains from the 1500 's through the mid-twentieth century. Lecture 3 hours.

## 4511-3* SELECTED TOPICS IN THE GREAT PLAINS EXPERIENCE, $1-3$ hours credit

Intensive independent reading and research on a specific topic in the Great Plains environment or culture, based on pre-approved outlines or plans, with regular conferences and with oral and written reports. The reading and research will be directed by a faculty member from the art, English, music, or history and humanities departments. Prerequisite: HUM 2513 or permission of instructor.

## MUSEUM STUDIES (MUSM)

## 2003 INTRODUCTION TO MUSEUM STUDIES, 3 hours credit

This course will provide the student a basic introduction to the study of museology. Course topics may include a general history of the evolution, function, and purpose of museums; an understanding of basic museum operations including accessioning, exhibit preparation, conservation, artifact evaluation and cataloging. Students will also acquire a basic knowledge of more specific museum functions such as preserving photographs, manuscripts, and artifacts; developing living history materials and presentation; and acquiring skills in education and community outreach. Lecture 3 hours. Prerequisites: HIST 1483 and HIST 1493.

## 3003 ADVANCED MUSEUM STUDIES, 3 hours credit

This course will provide the student in-depth preparation for a career in museum work. Students will acquire skills in preserving artifacts such as paintings, clothing, tools, and implements, furnishings, buildings, and manuscripts. They will also learn skills in developing exhibits and will construct an exhibit of museum quality. Students will design an outreach program appropriate for public schools, community, and handicapped audiences. They will become knowledgeable concerning the various types of museums by observing the operations of country, university, art, history, and military museums in the region. This course will also teach skills required for successful grant-writing. Lecture 3 hours. Prerequisite MUSM 2003.

## 4003 MUSEUM INTERNSHIP, 3 hours credit

The museum internship will provide supervised experience in an approved museum/museums. The student will acquire skills in several areas of the museum, keep a journal of his/her experiences, and complete a project designed by his/her faculty advisor in collaboration with museum personnel. May be repeated for a total of 6 hours credit. Prerequisites: MUSM 2003 and MUSM 3003.

## PHILOSOPHY COURSES (PHIL)

## 1113* INTRODUCTION TO PHILOSOPHY, 3 hours credit <br> How to construct a logical world view. Lecture 3 hours.

## 2213* LOGIC, 3 hours credit

How to construct good arguments and avoid being taken in by bad ones. Lecture 3 hours.

## 3013* ETHICS, 3 hours credit

Critical study of important ethical theories and moral problems of contemporary interest (e.g., euthanasia, abortion, pornography, capital punishment, affirmative action). Lecture 3 hours. Prerequisite: PHIL 1113 or PHIL 2213 or permission of instructor.

## 3123* METAPHYSICS, 3 hours credit

Critical study of three fundamental philosophical topics: God, immortality and freedom. Related topics to be discussed include dualism, idealism, materialism, determinism, and the claim that science can give a complete explanation or description of all that is real. Lecture 3 hours. Prerequisite: PHIL 1113 or 2213 or permission of instructor.

## 4591-3* DIRECTED READINGS IN PHILOSOPHY, 1-3 hours credit

Intensive study of texts on a specific philosophical subject. Requires regular consultation with the instructor as well as preparation of extensive written work. May be repeated with different topics for up to 6 hours credit. Prerequisites: PHIL 1113, PHIL 2013, and instructor's permission.

## POLITICAL SCIENCE COURSES (PS)

## 1113* AMERICAN FEDERAL GOVERNMENT, 3 hours credit

A study of the American government system. The American experiment in federalism and democracy; origin and development of the United States Constitution; federal-state relations, civil liberties, the individual as a citizen; political parties; governmental services. Lecture 3 hours. Prerequisite: Eligibility for ENGL 1113.

## 2001-3* SPECIAL PROBLEMS IN POLITICAL SCIENCE, 1 -3 hours credit

An analysis of a selected problem or special topic in political science. May be repeated with different topics for a total of 6 hours credit. Prerequisites: Sophomore standing and departmental permission.

## 2023* STATE AND LOCAL GOVERNMENT, 3 hours credit

A study of the various political units in the United States with emphasis on states, counties, and municipalities. Lecture 3 hours.

## 2113* CONCEPTS OF POLITICAL SCIENCE, 3 hours credit

An introduction to basic political concepts, institutions and processes, as well as a review of career opportunities for political scientists. Lecture 3 hours.

## 2613* INTRODUCTION TO POLITICAL THOUGHT, 3 hours credit

Introduction to the philosophical analysis of politics through study of selected central questions of political thought (such as the nature of justice, power, liberty, or the best regime) in relation to the principles of classical liberalism. Lecture 3 hours.

## 2713* PUBLIC ADMINISTRATION, 3 hours credit

An introductory course to acquaint students with the field of public administration. Topics include the development of public administration and its polifical setting, organization theory and behavior, administrative processes, and current issues in public administration. Lecture 3 hours.

## 2793 RESEARCH METHODS IN POLITICAL SCIENCE, 3 hours credit

The study and application of empirical research methods in political science. The course will include an overview of research designs, the conduct of empirical research, and the organization and preparation of research papers. Lecture 3 hours.

## 3003* OKLAHOMA GOVERNMENT AND POLITICS, 3 hours credit

An advanced analysis of the structure and function of the government of Oklahoma and the complex political forces operating upon state government. Focus on the state constitution, the institutions it creates, and related political institutions such as political parties. Lecture 3 hours.

## 3013* POLITICAL PARTIES AND INTEREST GROUPS, 3 hours credit

An analysis of the history, functions, and structure of American political parties and interest groups with a special focus on the interrelationships between parties, groups, campaigns, governmental institutions, public policy formation, and voting behavior. Lecture 3 hours.

## 3023* PUBLIC OPINION, 3 hours credit

A study of the measurement and nature of public opinion in America. Topics include a methodology critique of public opinion survey research, fundamentals and enduring opinions, and public opinion research on contemporary issues. Lecture 3 hours.

## 3043* THE MEDIA IN AMERICAN POLITICS, 3 hours credit

A comprehensive analysis of the media in American politics, including an analysis of media modes, news development, restraints on the media, the people and the media, intermediaries and the media, and how the branches of government interact with the media. 3 hours.

## 3113* THE FORMATION OF PUBLIC POLICY, 3 hours credit

An analysis of the development of public policies in the solution of national problems. Lecture topics include the process of making, implementing, and evaluating public policies. Students select a policy issue of interest and prepare a thoughtful paper on the subject. Lecture 3 hours.

## 3213* INTERNATIONAL RELATIONS, 3 hours credit

The political dynamics and machinery of international relations, with emphasis on the norms and techniques of nationalism, imperialism, collective security and the formation and execution of foreign policy. Lecture 3 hours.

## 3223* INTERNATIONAL ORGANIZATIONS, 3 hours credit

An analysis of the background, formation, aims, activities and accomplishments of international government organizations, with emphasis on the United Nations and related agencies. Lecture 3 hours.

## 3333 COMPARATIVE GOVERNMENT, 3 hours credit

A survey of concepts, approaches, and models used in comparative political research. The course includes an analysis of selected political systems in the modern world including liberal democracies, communist/postcommunist systems, and developmental authoritarian regimes. Lecture 3 hours.

## 3483* THE AMERICAN PRESIDENCY, 3 hours credit

A comprehensive analysis of American constitutionalism and constitutional law, to include development of governmental powers, federalism, and civil rights and civil liberties. Lecture 3 hours.

## 3513* THE LEGISLATIVE PROCESS, 3 hours credit

An analysis of the legislative process in the U.S. with a focus on the structure and function of the U.S. Congress. Comparisons between Congress, state legislatures, and foreign legislative bodies will be developed. Lecture 3 hours.

## 3613* HISTORY OF POLITICAL THOUGHT, 3 hours credit

Examination of the development of political philosophy from the art of rule in classical political thought through the development of liberal democracy in the Enlightenment to the criticisms of liberalism in the late $19^{\text {th }}$ century. Lecture 3 hours.

## 3633* AMERICAN POLITICAL THOUGHT, 3 hours credit

Main currents and cross-currents in American political thought from Puritanism to the present with emphasis on those concepts and ideas which have most decisively influenced the evolution of the federal system of government. Lecture 3 hours.

## 3721-3 INTERNSHIP IN POLITICAL SCIENCE, 1-3 hours credit

Placement of advanced political science majors in applied job settings. Involves frequent contact with faculty supervisor and off-campus supervisor evaluation. May be repeated for a total of 6 hours credit. Prerequisites: Political science major, junior standing, and instructor's permission.

## 3813* CONSTITUTIONAL LAW AND GOVERNMENT: THE AMERICAN EXPERIENCE, 3 hours credit

A comprehensive analysis of American constitutionalism and constitutional law, to include development of governmental powers, federalism, and civil rights and civil liberties. Lecture 3 hours.

## 4023* THE POLITICS OF DEVELOPING NATIONS, 3 hours credit

An analysis of political institutions and processes with emphasis on selected developing countries in Africa, Asia, Latin America and the Middle East. Lecture 3 hours.

## 4043* EUROPEAN POLITICS, 3 hours credit

A comparative analysis of political processes and institutions of selected European countries. Topics include constitutional structure; legislative, executive, and judicial processes; political parties; electoral systems; public policy; and international relations. Lecture 3 hours.

## 4053* U.S. FOREIGN POLICY, 3 hours credit

An examination of the content, formulation, and execution of U.S. foreign policy, with emphasis on the postWorld War II period. The course also explores the relationship of U.S. foreign policy to its domestic foundations and to the larger international system. Lecture 3 hours.

## 4253* THE JUDICIAL PROCESS, 3 hours credit

An analysis of the court system in the United States, focusing on the United States Supreme Court, lower federal courts, federal-state judicial relations, and the role of the judicial system in American policy processes. Lecture 3 hours.

## 4491-3* SELECTED TOPICS IN POLITICAL SCIENCE, $\boldsymbol{1}-\mathbf{3}$ hours credit

An intensive analysis of a selected political problem or special topic in political science. May be repeated with a different topic for a total of 6 hours credit. Lecture 1-3 hours.

## 4591-3* INDEPENDENT STUDY IN POLITICAL SCIENCE, 1 - $\mathbf{3}$ hours credit

Intensive independent reading on or study of a specific problem or subject in political science, based on a pre-approved outline or plan, with regular conferences with the instructor and submission of extensive written work. May be repeated with different topics for a total of 6 hours credit. Prerequisites: Political science major, junior standing, and instructor's permission.

## 4613* PHILOSOPHICAL ISSUES IN CONTEMPORARY POLITICS, 3 hours credit

Philosophical analysis of three to five selected issues in contemporary politics. Issues will vary each time the course is offered based on timeliness and importance of issues, including topics such as globalization, hate speech, political violence, or institutional design. Lecture 3 hours.

4673* CONTEMPORARY POLITICAL THOUGHT, 3 hours credit
Study of central frameworks of normative political theory since 1950, such as liberalism, communitarianism, feminism, and postmodernism. Lecture 3 hours.

* Liberal arts and sciences course.


## DEPARTMENT OF

## Music

CHAIR (INTERIM) - John Moots, Assistant Professor<br>Professors: Labé, Lambert, Whang<br>Associate Professors: Hoepfner, E. Logan<br>Assistant Professors: J. Logan, Sheridan, K. Underwood

The Department of Music offers programs leading to a Bachelor of Arts degree with a major in Music, and a Bachelor of Music degree with a major in Music. The Music program emphasizes the development of musical knowledge and performance skills in all students. The Bachelor of Music degree helps prepare students for professional careers as performers, composers or teachers. The Bachelor of Arts degree in Music provides a program of study in the general principles of musicianship and performance for students who possess a love of music, who will be involved in music throughout their lifetimes, but may not pursue a full-time career in music. These students integrate their training with a more pragmatic field of study in their minor field. The department also offers a minor in music for students interested in developing a secondary area of interest, and serves non-majors by giving them opportunities to improve their music knowledge and skills. Performances and recitals give students an opportunity to refine their performance skills and help fulfill the outreach mission of the department.

## BACHELOR OF ARTS DEGREE MAJOR IN MUSIC (160)

I. GENERAL EDUCATION REQUIREMENTS ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... 43 hours
MUSC 1000 ( 7 semesters), Band/Choir/Accomp./Orch. (7 semesters), MUSC 1413, MUSC 1423, MUSC 2312, MUSC 2332, MUSC 3313, MUSC 3333 , MUSC 3513, MUSC 3523, MUSC 3612, Major Lesson Field 8 hours (minimum 2 hours at 4000 level), Piano 4 hours.
(All music majors (B.A. Degree) must pass a junior standing examination and a keyboard proficiency examination before their junior year.)
IV. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.
BACHELOR OF MUSIC DEGREE MAJOR IN MUSIC (161)
I. GENERAL EDUCATION REQUIREMENTS ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 78 hours

Core Requirements ( 41 hours) MUSC 1000 (7 semesters),
Band/Choir/Accomp/Orch (7 semesters), MUSC 1413, MUSC 1423,
MUSC 2312, MUSC 2321, MUSC 2332, MUSC 2341, MUSC 3313,
MUSC 3321, MUSC 3333, MUSC 3341, MUSC 3513, MUSC 3523,
MUSC 3612, MUSC 3622, MUSC 4322, MUSC 4332, MUSC 4990
Concentration ( $\mathbf{3 7}$ hours) Select one of the following:
Concentration in Instrumental Music Education (Woodwind, Brass, Percussion, Strings) MUSC 1201 Class Voice (2 hours) or MUSC 3801 Private Voice (2 hours), MUSC 3642, MUSC 3652, MUSC 3662, MUSC 3672, MUSC 4343, MUSC 4712, MUSC 4722, Major Lesson Field ( 12 hours, minimum 4 hours at 4000 level), Piano ( 4 hours), Electives in Music ( 4 hours). Major ensembles are: MUSC 1111, MUSC 1121 (Strings), or MUSC 3161 (Guitar). Additional course work and testing requirements beyond this degree concentration must be met in order to pursue a career teaching in the public schools. Students should schedule an advisement session in the first semester in this concentration.

Concentration in Vocal Music Education/Keyboard Music Education MUSC 3812 or 1 course selected from MUSC $3642,3652,3662$, or 3672 , MUSC 4343, MUSC 4712, MUSC 4732, Vocal-MUSC 3761 ( 3 semesters - each in a different language), MUSC 4753, Keyboard-MUSC 4743, Major Lesson Field ( 12 hours, minimum 4 hours at 4000 level), Piano (vocal major) or Voice (piano major) 6 hours, Electives in Music to total 37 hours. Major ensembles are MUSC 1141 (Vocal), MUSC 3171 (Keyboard). Additional course work and testing requirements beyond this degree concentration must be met in order to pursue a career teaching in the public schools. Students should schedule an advisement session in the first semester in this concentration.

Concentration in Keyboard Performance MUSC 4743, MUSC 4343, MUSC 3983, MUSC 4312, Major Lesson Field ( 16 hours, minimum 8 hours at 4000 level), Minor Lesson Field ( 6 hours), MUSC 3990, MUSC 4981, Electives in Music ( 6 hours). Major ensemble is: MUSC 3171.

Concentration in Instrumental Performance (Woodwind, Brass, Percussion, Strings) MUSC 4343, MUSC 4312, Major Lesson Field ( 16 hours, minimum 8 hours at 4000 level), Piano (4 hours), Private Lessons in Secondary Instruments ( 6 hours), MUSC 3990, MUSC 4981, Electives in Music ( 5 hours). Major ensembles are: MUSC 1111, MUSC 1121, and MUSC 3161 (Guitar).

Concentration in Vocal Performance MUSC 4343, MUSC 4312, MUSC 4753, MUSC 3761 ( 3 semesters - each in a different language), Major Lesson Field (16 hours, minimum 8 hours at 4000 level), Piano ( 6 hours), MUSC 3990, MUSC 4981, Electives in Music ( 3 hours). Major ensemble is: MUSC 1141.

Concentration in Composition MUSC 4343, MUSC 4312, MUSC 3351 ( 6 hours), MUSC 4351 ( 8 hours), MUSC 4362, Private Lesson Piano (4 hours), Minor Lesson Field ( 6 hours), MUSC 3990, MUSC 4981, Electives in Music ( 5 hours). Major ensemble is according to minor lesson field: MUSC 1111, MUSC 1121, MUSC 1141, MUSC 3171 or MUSC 3161 (Guitar).

All Music Majors (B.M. Degree) must pass an entrance examination, a junior standing examination, and a keyboard proficiency examination. A music major is required to enroll in the major ensemble of the student's area of concentration for 7 semesters.

## MUSIC COURSES (MUSC)

## 1000 CONCERT AND RECITAL ATTENDANCE, 0 hours credit

Each semester the music faculty will compile a list of concerts and recitals occurring in the Lawton area. To qualify for graduation, music majors must complete seven satisfactory semesters.

## 1013* AMERICAN POPULAR MUSIC, 3 hours credit

The study of the various styles in American popular music. An introduction to jazz, country-western, folk, musical, theater, blues, rock, electronics, etc. Intended for the non-music major. Lecture 3 hours.

## 1023* MUSIC APPRECIATION, 3 hours credit

Study of our cultural heritage through an acquaintance with the elements of music and a variety of musical styles. The course includes listening to recorded music and live performance. Lecture 3 hours.

## 1033 WORLD MUSIC IN CULTURE, 3 hours credit

The study of world music in various cultural contexts. An exploration of the relationships between world music and identity, everyday life, worship and belief, dance, memory, migration, and politics. Fieldwork and written reports emphasize the application of course content. Lecture 3 hours.

## 1110-1 BAND, 0-1 hour credit

Performance ensemble open to all University students. Rehearsal 3-5 hours per week. Prerequisite: Permission of Director. May be repeated for credit or non-credit.

## 1120-1 ORCHESTRA, $0-1$ hour credit

Performance ensemble open to all University students. Rehearsal 3-5 hours per week. Prerequisite: Permission of Director. May be repeated for credit or non-credit.

## 1130-1 JAZZ ENSEMBLE, 0-1 hour credit

Performance ensemble open to all University students. Rehearsal 3-5 hours per week. Prerequisite: Permission of Director. May be repeated for credit or non-credit.

## 1140-1 CHOIR, 0-1 hour credit

Performance ensemble open to all University students. Rehearsal 3-5 hours per week. Prerequisite: Permission of Director. May be repeated for credit or nen-credit.

## 1201 CLASS LESSONS, 1 hour credit

Class instruction in an orchestral instrument, keyboard, voice or guitar. Lab 2 hours. Requires 5 hours practice per week. May be repeated for credit.

## 1413* MUSIC LITERATURE I, 3 hours credit

The study of the development of musical styles from antiquity to the Classical period and the associated techniques of listening to music. Lecture 3 hours.

## 1423* MUSIC LITERATURE II, 3 hours credit

The study of the development of musical styles from the Classical period to the present and the associated techniques of listening to music. Lecture 3 hours. Prerequisite: MUSC 1413.

## 2201-2 PRIVATE LESSONS, 1 -2 hours credit

Private instruction in an orchestral instrument, keyboard, voice or guitar. One half-hour lesson per week per credit enrolled, maximum one hour lesson per week. Requires minimum 5 hours per week of practice per hour enrolled. May be repeated to a maximum 12 hours per instrument. Prerequisite: Departmental permission.

## 2301* MUSIC FUNDAMENTALS, 1 hour credit

An introduction to the basic signs and symbols and the theory of music. Lab 2 hours.

## 2312* HARMONY AND STRUCTURE I, 2 hours credit

The study of the harmony and structure of music through music analysis, composition and the development of associated functional keyboard skills. Lecture 1 hour/lab 2 hours. Recommended for music majors only.

## 2321* SIGHT-SINGING AND EAR TRAINING I, 1 hour credit

The The study and development of sight singing and ear training skills through the mastery of written, visual, singing and aural techniques. Lab 2 hours. Concurrent enrollment with MUSC 2312 recommended.

## 2332* HARMONY AND STRUCTURE II, 2 hours credit

A continuation of MUSC 2312. Lecture 1 hour/lab 2 hours. Prerequisite: MUSC 2312.

## 2341* SIGHT-SINGING AND EAR TRAINING II, 1 hour credit

A continuation of MUSC 2321. Lab 2 hours. Prerequisite: MUSC 2321. Concurrent enrollment with MUSC 2332 recommended.

## 3160-1 SMALL ENSEMBLE, 0-1 hour credit

Participation in instrumental, keyboard, vocal or guitar ensemble. Rehearsal 2-4 hours per week. Prerequisite: Departmental permission. May be repeated for credit or non-credit..

## 3171 ACCOMPANYING, 1 hour credit

Piano performance experience through accompanying soloists, small and large ensembles and musical/opera productions. Rehearsal 2-4 hours plus practice each week. Prerequisite: Departmental permission. May be repeated for credit.

3313* HARMONY AND STRUCTURE III, 3 hours credit<br>A continuation of MUSC 2332. Lecture 3 hours. Prerequisite: MUSC 2332.

## 3321* SIGHT-SINGING AND EAR TRAINING III, 1 hour credit

A continuation of MUSC 2341. Lab 2 hours. Prerequisite: MUSC 2341. Concurrent enrollment with MUSC 3313 recommended.

3333* HARMONY AND STRUCTURE IV, 3 hours credit
A continuation of MUSC 3313. Lecture 3 hours. Prerequisite: MUSC 3313.

## 3341* SIGHT-SINGING AND EAR TRAINING IV, 1 hour credit

A continuation of MUSC 3321. Lab 2 hours. Prerequisite: MUSC 3321. Concurrent enrollment with MUSC 3333 recommended.

## 3351-3 COMPOSITION, 1-3 hours credit

An exploration of various compositional styles and techniques. Lecture 1 hour/lab 1 hour. Prerequisite: MUSC 2312. May be repeated for credit.

## 3513* MUSIC HISTORY I, 3 hours credit

A general study of music development from antiquity through the Baroque era. Lecture 3 hours. Prerequisite: MUSC 1423.

## 3523* MUSIC HISTORY II, 3 hours credit

A continuation of MUSC 3513 from Classical through Contemporary music. Lecture 3 hours. Prerequisite: MUSC 3513.

## 3612* FUNDAMENTALS OF CONDUCTING, 2 hours credit

A beginning course in the principles of both choral and instrumental conducting. Lecture 1 hour/lab 2 hours.

## 3622 ADVANCED CONDUCTING, 2 hours credit

The techniques of reading scores, use of the baton and interpretation. Practical experience in conducting. Prerequisite: MUSC 3612. Lecture 1 hour/lab 2 hours.

## 3642 WOODWIND METHODS, 2 hours credit

The study of flute, oboe, clarinet, bassoon, and saxophone. Basic concepts of playing and teaching woodwind instruments; survey of methods, materials and field experience. Lecture 1 hour/lab 2 hours.

## 3652 BRASS METHODS, 2 hours credit

Study of trumpet, french horn, euphonium, trombone and tuba. Basic concepts of playing and teaching brass instruments; survey of methods, materials and field experience. Lecture 1 hour/lab 2 hours.

## 3662 STRING METHODS, 2 hours credit

The study of the violin, viola, violoncello, double bass and guitar. Basic concepts of playing and teaching string instruments; survey of methods, materials and field experiences. Lecture 1 hour/lab 2 hours.

## 3672 PERCUSSION METHODS, 2 hours credit

Study of fundamentals of all percussion instruments. Basic concepts of playing and teaching percussion instruments; survey of methods, materials and field experiences. Lecture 1 hour/lab 2 hours.

## 3683 MUSIC FOR THE ELEMENTARY TEACHER, 3 hours credit

Rudiments for the general teacher. Functional approach to theory, singing, rhythm and piano. Materials and methods for the classroom. Lecture 3 hours.

## 3761* ITALIAN, FRENCH, GERMAN DICTION, 1 hour credit

An introduction to diction in Italian, German, and French based on the song literature and using the International Phonetic Alphabet. Each language offered separately. Lab 2 hours.

## 3801-4 PRIVATE LESSONS, 1-4 hours credit

Private instruction in an orchestral instrument, keyboard, voice or guitar. One half-hour lesson per week per credit hour enrolled, maximum one hour lesson per week. Requires minimum 5 hours per week of practice per hour enrolled. May be repeated to a maximum of 12 hours per instrument. Prerequisite: Departmental permission. Open to music majors only.

## 3812 INSTRUMENTAL METHODS FOR VOCAL AND KEYBOARD EDUCATION, 2 hours credit <br> A study of brass, woodwind, stringed, fretted and percussion instruments for Vocal Music Education and

 Keyboard Music Education majors. Students will learn basic techniques, performance skills, and methodology for all instrumental families. Lecture 1 hour/lab 2 hours.
## 3981-3 SEMINAR, 1 -3 hours credit

A course designed to give students the opportunity to study a subject not covered in the regular course offerings or not covered in sufficient depth for their needs. Prerequisite: Departmental permission.

## 3990 JUNIOR RECITAL, 0 hours credit

A pre-senior performance in the student's major area of study, normally one half-hour in length. Prerequisite: Permission of the Department Chairman.

## 4312* COUNTERPOINT, 2 hours credit

A study of Eighteenth Century species counterpoint through analysis and composition. Lecture 2 hours. Prerequisite: MUSC 3333.

## 4322* TWENTIETH CENTURY TECHNIQUES, 2 hours credit

A study of 20th Century harmonic and melodic techniques approached through original composition, analysis and performance. Lecture 2 hours. Prerequisite: MUSC 3333.

## 4332* FORM AND ANALYSIS, 2 hours credit

A study of the standard polyphonic and homophonic forms of the 18 th and 19 th centuries. Lecture 2 hours. Prerequisite: MUSC 3333.

## 4343* ARRANGING, 3 hours credit

The study of the art of arranging for instrumental and vocal ensembles. Lecture 3 hours. Prerequisite: MUSC 3333.

## 4351-3 COMPOSITION, $1-3$ hours credit

An exploration of various compositional styles and techniques. Lecture 1 hour/lab 1 hour. Prerequisite: Junior standing in composition. May be repeated for credit. Open to music composition majors only.

## 4362 COMPUTER MUSIC, 2 hours credit

An introduction to the literature, equipment and techniques of computer music. This course is designed to provide the student with practical experience in the manipulation of sound in a computerized music studio. Lecture 1 hour/lab 2 hours. Prerequisite: Departmental permission.

## 4702 MARCHING BAND TECHNIQUES, 2 hours credit

The study of marching band drill design, show concepts and marching pedagogy. Lecture 1 hour/lab 2 hours.

## 4712 ELEMENTARY METHODS, 2 hours credit

A professional training course for students preparing to teach elementary school music. Includes philosophies and practices of current leading music educators with classroom experience relating to conceptual approach. Teacher Certification students must be admitted to teacher education prior to enrollment in this course. Lecture 2 hours. Prerequisite: Restricted to students admitted to teacher education.

## 4722 SECONDARY INSTRUMENTAL METHODS, 2 hours credit

A professional training course for students preparing to teach secondary school instrumental music. Study of philosophy, psychology and pedagogy as applied to the teaching of instruments. Teacher Certification students must be admitted to teacher education prior to enrollment in this course. Lecture 2 hours. Prerequisite: Restricted to students admitted to teacher education.

## 4732 SECONDARY VOCAL METHODS, 2 hours credit

A professional training course for students preparing to teach secondary school vocal music. Study of philosophy and pedagogy as applied to the teaching of vocal music. Teacher Certification students must be admitted to teacher education prior to enrollment in this course. Lecture 2 hours. Prerequisite: Restricted to students admitted to teacher education.

4733* KEYBOARD LITERATURE, 3 hours credit
Survey of keyboard literature. Lecture 3 hours.

## 4743 KEYBOARD PEDAGOGY, 3 hours credit

The study of teaching techniques and materials for class and private instruction. Lecture 3 hours. Prerequisite: Departmental permission.

## 4753 VOCAL PEDAGOGY, 3 hours credit

The study of vocal training techniques including anatomy of vocal tract, physiological process and acoustical properties, methods and materials. Lecture 3 hours. Prerequisite: Departmental permission.

## 4801-4 PRIVATE LESSONS, 1-4 hours credit

Private instruction in an orchestral instrument, keyboard, voice or guitar. One half-hour lesson per week per credit hour enrolled, maximum one hour lesson per week. Requires minimum 5 hours per week of practice per hour enrolled. May be repeated to a maximum 16 hours per instrument. Prerequisite: Junior standing. Open to music majors only.

## 4910-4 WORKSHOP, 0-4 hours credit

A concentrated specific activity utilizing lectures and practical application exercises. May be repeated for credit to a maximum of 8 hours credit.

## 4981-3 INDEPENDENT STUDY, 1-3 hours credit

A special study based on the needs of the individual student directly related to the student's major.
Individual guidance will be provided by a faculty member. Prerequisite: Departmental permission. The total number of hours earned in independent study may not exceed four.

4990 SENIOR RECITAL, 0 hours credit
Culminating performance in the student's major area of study. Normally one hour in length. Prerequisite: Permission of the Department Chair.
${ }^{*}$ Liberal arts and sciences course

## DEPARTMENT OF

## T HEATRE ARTS

CHAIR - Scott Richard Klein, Professor
Professor: Fennema
Assistant Professor: Ash

The Bachelor of Arts degree with a Major in Theatre provides a program of study focusing on opportunities for personal and artistic development and growth, as well as opportunities to develop collaboration, communication, reasoning and leadership skills required for professional careers in theatre or related areas. Students pursing the program in Theatre Arts should achieve a level of competence in performance, technical theatre, and the academic areas of theatre history, literature and criticism/analysis. They acquire skills in each of these areas through the department's course offerings, as well as through its production program. The production aspect of the program also provides an important community outreach opportunity. Non-majors may select Theatre Arts courses to fulfill humanities requirements or as electives.

## BACHELOR OF ARTS DEGREE <br> MAJOR IN THEATRE (170)

I. GENERAL EDUCATION REQUIREMENT 50 hoursGeneral Education requirements are found on the red striped pages.
II. MAJOR ..... 56 hoursAll Theatre majors are required to keep a portfolio of their work and complete afinal project. (See advisor for details.)
Core Requirements ..... 35 hoursTHTR 1001 ( 8 semesters), THTR 1103, THTR 1203, THTR 2403,THTR 2603, THTR 3403, THTR 3803, THTR 3813, THTR 3823,THTR 3833
A. PERFORMANCE OPTION 15 hours
THTR 1133, THTR 1503, THTR 1603, THTR 3603, THTR 4603
B. TECHNICAL OPTION ..... 15 hours
THTR 2203, THTR 2503, THTR 3303, THTR 1503 or THTR 3703 , and either THTR 4203, THTR 4303, or THTR 4503
Electives in Theatre ..... 6 hours
Any combination of THTR 1901-3, THTR 3901-3, THTR 4901-3, THTR 4911-3, THTR 4921-6
III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.

Students must have 80 hours liberal arts and sciences courses.

## FINE ARTS COURSE (FNAR)

1013* EXPLORING MULTICULTURALISM THROUGH THE ARTS, 3 hours credit
An interdisciplinary course which presents a cross-cultural exploration of the world through a study of representative art forms -- art, communications, dance, music, and theatre. Lecture 3 hours.

## THEATRE ARTS COURSES (THTR)

## 1001 THEATRE PRACTICUM, 1 hour credit

A required course open only to theatre majors. Each theatre major, while in residence, must contribute a minimum of three hours per week per semester to assignments in one or more of the following areas: Box Office, Costuming, Promotion, and Scenery Construction. These three hours are independent of and in addition to any other course, work-study, or laboratory assignments.

## 1103* INTRODUCTION TO THEATRE, 3 hours credit

An exploration of the theatre as an art form including forms of drama, styles of production, relationship of performer to audience, basic acting/directing techniques and theories, technical theatre, responsibilities of personnel and performers and how to view a play. Primarily a discussion and observation course with emphasis on building a vocabulary of theatre terms. Lecture 3 hours.

## 1133* VOICE AND DICTION, 3 hours credit

A general study of the structure of the vocal mechanism; principles of vocal quality, articulation, and pronunciation. Lecture 3 hours.

## 1203* TECHNICAL PRODUCTION, 3 hours credit

An introduction to technical theatre: stage management, scenery, and lighting. Responsibilities and procedures of the stage manager; methods and materials used in construction and rigging of stage scenery; lighting techniques, instruments and principles; stage terminology. Lecture 3 hours. Prerequisite: THTR 1103 or permission of instructor.

## 1503* MAKE-UP, 3 hours credit

Principles and practice of application of stage make-up; corrective, character, old age, likeness, and fantasy. Lecture 2 hours/Laboratory 2 hours.

## 1603 STAGE MOVEMENT, 3 hours credit

A general understanding of the use and connection of the body and mind as an expressive instrument. Through various theories and techniques to be introduced, a student will develop physically and mentally in strength, agility, flexibility, coordination, flow and balance. The student will also be introduced to current movement theories used in actor training. Lecture 1 hour/Laboratory 2 hours.

## 1901-3 THEATRE LAB, 1-3 hours credit

Open to all University students. Laboratory experience in performance, technical production, and management. Arranged around the student's schedule. May be repeated for credit. Permission of instructor.

## 2203* STAGECRAFT, 3 hours credit

Intensive study and practice in planning, layout, construction, and painting of the stage setting. Tools, materials, and resources used by the stage technician. Lecture 2 hours/Laboratory 2 hours. Prerequisite: THTR 1203 or permission of instructor.

## 2403 STAGE MANAGEMENT, 3 hours credit

The techniques of production stage management, including preparing the prompt script, rehearsal procedures, organizing the technical elements, cueing and running the performance. Prerequisite: THTR 1203 or permission of instructor. Lecture 3 hours.

## 2503* COSTUME TECHNIQUES, 3 hours credit

Basic costuming skills and sewing techniques will be studied. Various types of sewing and construction will be explored along with work in pattern development. Other costume skills which include script analysis, costume plots, renderings and presentation of costume designs will be studied. Lecture 2 hours/Laboratory 2 hours.

## 2603* ACTING I, 3 hours credit

Development of basic acting skills including self-awareness, movement, verbal and non-verbal communication, improvisation and working within an ensemble. Lecture 2 hours/lab 2 hours. Prerequisite: THTR 1103 or permission of instructor.

## 3303* LIGHTING, 3 hours credit

Mechanics of stage lighting: instrumentation, basic electricity, control systems, color mixing, and graphic presentation. Involves participation in preparing lighting for major productions. Lecture 2 hours/Laboratory 2 hours. Prerequisite: THTR 1203 or permission of instructor.

## 3403* DIRECTING, 3 hours credit

A study of directing fundamentals including script selection and analysis, concept development, casting, rehearsing, and staging a production. Lecture 2 hours/Laboratory 2 hours. Prerequisites: THTR 1203 and THTR 2603 or permission of instructor.

## 3603*ACTING II, 3 hours credit

Basic acting skills applied to memorized scene work. Techniques of character development and script analysis using scenes from contemporary scripts. Scene study. Lecture 2 hours/Laboratory 2 hours. Prerequisite: THTR 2603.

## 3703* AUDIO, 3 hours credit

The nature of sound; operating principles and choice of equipment; design of reinforcement, effects and communications systems. Aesthetic use of sound and role of the sound designer. Projects in practical application. Lecture 3 hours.

## 3803* THEATRE AND DRAMA: THE BEGINNINGS, 3 hours credit

A study of the evolution of drama, theatre architecture, technical theatre, acting and directing from the beginnings of theatre and drama to the Italian Renaissance. Lecture 3 hours.

## 3813* THEATRE AND DRAMA: THE RENAISSANCE AND JAPAN, 3 hours credit

A study of the evolution of drama, theatre architecture, technical theatre, acting, and directing during the Renaissance (1400-1700) and an overview of Japanese theatre history and drama. Lecture 3 hours.

## 3823* THEATRE AND DRAMA: THE EIGHTEENTH AND NINETEENTH CENTURIES, 3 hours

 creditA study of the evolution of drama, theatre architecture, technical theatre, acting, and directing from 1660 England to the birth of realism. Lecture 3 hours.

## 3833* THEATRE AND DRAMA: THE TWENTIETH CENTURY AND CHINA, 3 hours credit

A study of the evolution of drama, theatre architecture, technical theatre, acting, and directing during the 20th Century and including an overview of Chinese theatre. Lecture 3 hours.

## 3901-3 WORKSHOP, 1-3 hours credit

Experimentation, reading, research, lecture and/or discussion in various areas of theatre history, technology, performance and practice. Designed to give intensive emphasis to a specific area of theatre including improvisation, directing projects, designs, original scripts, etc. Laboratory 2-6 hours. Prerequisite: Permission of the department. May be repeated for credit.

## 4203* SCENE DESIGN, 3 hours credit

Theories and principles of design for the stage. History, styles, and aesthetics of scenic elements. Projects in analysis, research, and communication of a concept through graphic means. Lecture 3 hours. Prerequisite: THTR 2203.

## 4303* LIGHTING DESIGN, 3 hours credit

Investigation and evaluation of lighting practice and artistry. Creation of the design concept, light plots, and schemes of execution. The role of the lighting designer in the contemporary theatre. Lecture 3 hours. Prerequisite: THTR 3303.

## 4503* COSTUME DESIGN, 3 hours credit

Principles of costume design for the stage; development and rendering of design concepts; use of historic, stylistic and fantasy elements in stage realization. Lecture 3 hours. Prerequisite: THTR 2503.

4603* ACTING III: PERIOD STYLES, 3 hours credit
Lecture, monologue, and scene work in period acting styles with a concentration on the works of William Shakespeare in order to develop an appreciation and understanding of the different acting styles from antiquity to the present day. Lecture 2 hours/Laboratory 2 hours. Prerequisite: THTR 3603.

## 4901-3 INDEPENDENT STUDY, 1 -3 hours credit

An individual study course of advanced nature. Subject matters vary with background and interest of student. Prerequisite: Permission of department. May be repeated for credit.

## 4911-3 SEMINAR, $1-3$ hours credit

Concentrated investigation of specific problems and/or areas in theatre. Prerequisite: Permission of department. May be repeated for credit.

## 4921-8 INTERNSHIP, 1-8 hours credit

Off-campus work with regional or national theatre companies and firms specializing in theatrical goods and services. Open only to juniors and seniors with permission of the department. May be repeated for credit.
*Liberal arts and sciences course.

# SCHOOL OF SCIENCE AND TECHNOLOGY 

Karla Oty, Interim Dean

DEPARTMENT OF AGRICULTURE Dr. Leon Fischer, Chair

## DEPARTMENT OF BIOLOGICAL SCIENCES <br> Gabriela Adam-Rodwell, Chair

# DEPARTMENT OF COMPUTING AND TECHNOLOGY Johnny Carroll, Chair 

DEPARTMENT OF MATHEMATICAL SCIENCES Karla Oty, Chair

## DEPARTMENT OF MILITARY SCIENCE LTC William G. Pitts, Chair

DEPARTMENT OF MULTIMEDIA DESIGN<br>Donald Aguilar, Chair

## DEPARTMENT OF PHYSICAL SCIENCES <br> Danny McGuire, Chair


#### Abstract

The mission of the School of Science and Technology is to offer students baccalaureate and associate level educational opportunities in the basic and applied sciences, mathematics, multimedia design, computing and technology. Courses in these fields are also provided to students in support of their general education requirements. Baccalaureate degrees are provided in the following fields of study: agriculture, biology, biology education, medical technology, mathematics, mathematics education, computer science, information technology, multimedia design, chemistry, chemistry education, natural science, physics, electronic engineering technology, engineering design technology and technology. Associate of applied science degrees are provided in multimedia design, information technology, computer aided design drafting, applied technology and electronic engineering technology. Programs leading to teacher licensure/certification are offered in biology, chemistry, and mathematics.


The Reserve Officers' Training Corps (ROTC) program complements a student's chosen field of study by developing the leadership skills required in a leader. Lower division'courses are open to all students with no military obligation. The program emphasizes leadership development through a combination of campus and off-campus classes and activities. Students may apply for 4, 3 and 2 year Army scholarships. Students who complete the program are eligible for a commission as a second lieutenant in the Active Army, Army Reserve or Army National Guard.

In supporting Cameron's role as an interactive university the School creates, transmits and utilizes existing and new basic and applied knowledge in meeting the needs of its constituents (students, citizens, organizations) in the University's Southwest Oklahoma regional service area, and beyond. In addition, the School is regularly involved in a wide variety of outreach activities and programs such as presentations at schools, camps, conferences, seminars, symposia and workshops.

## DEPARTMENT OF

## Agriculture

CHAIR - Leon Fischer, Associate Professor<br>Professor: Dodd<br>Assistant Professor: Dorsey, Schroeder, White


#### Abstract

The Agriculture Department offers the Bachelor of Science Degree with a major in Agriculture. Students majoring in Agriculture must choose a concentration in Agricultural Mechanization, Agronomy, Animal Science or Environmental Science. Majors may also elect the Agricultural Business Management option with any concentration or the Environmental Science option. Courses required of the agriculture major are chosen to achieve breadth of coverage of the agricultural and environmental sciences. The major is designed to prepare the graduate for careers in business, service, and agricultural production. Graduates are employed by government agencies such as the Natural Resources Conservation Service and the Farm Services Administration, in commercial banking institutions and with cooperative lenders such as Production Credit Associations or Federal Land Banks. Graduates may find employment as technical representatives for firms that manufacture and/or distribute seed, fertilizer, and agrichemicals. Nationwide, many graduates are employed in the agricultural industries which process and market food. Those with agriculture degrees will also find opportunities as managers of production agriculture firms or they may establish and own farms and ranches. The agriculture major includes many courses that satisfy requirements for entry into schools of veterinary medicine. The program also prepares graduates for entry into Masters degree programs in the agricultural, environmental and natural resource sciences.


## BACHELOR OF SCIENCE DEGREE MAJOR IN AGRICULTURE (400)

I. GENERAL EDUCATION REQUIREMENTS
50 hours General Education requirements are found on the red striped pages.
II. MAJOR ..... 42-71 hours
Required Core Courses 5 hours
AGRC 2423, AGRC 4572
Required Core Electives 23-25 hours
AGRC 1124, AGRC 1214, AGRC 1334, AGRC 2124, AGMC 1413, ENSC 2004, ESCI 1135Recommended Support CoursesCHEM 1364/1361, CHEM 1474/1471*, CHEM 3345 orCHEM 3314 and 3324, STAT 3013*Required for CHEM 2113, CHEM 3334, CHEM 3314, CHEM 3324
Concentrations and Options
Majors must select from one of the following concentrations or options:

| Animal Science Concentration |
| :---: |
| AGRC 1124 plus 14 hours from the following: |
| ANIM 3102, ANIM 3112, ANIM 3133, ANIM 3653, ANIM 4113, |
| ANIM 4123, ANIM 4133, ANIM 4333, ANIM 4423, ANIM 4434, |
| other courses approved by the Chair. |

Agronomy Concentration 14 hoursAGRC 1214, AGRC 2124 plus 14 hours from the following:AGRN 3213, AGRN 3312, AGRN 3434, AGRN 3513, AGRN 3683,AGRN 4123, AGRN 4223, AGRN 4234, AGRN 4673, other coursesapproved by the Chair.
Agriculture Mechanization Concentration ..... 14 hoursAGMC 1413 plus 14 hours from the following:AGMC 3123, AGMC 3152, AGMC 3172, AGMC 3223, AGMC 4203,AGMC 4702, AGMC 4802, other courses approved by the Chair
Agriculture Business Management Option ..... 41 hours
Choose concentration from above.Required Courses: AGRC 1334 plus AGRC 3303, AGRC 3413,ACCT 2013, BUS 3213, MGMT 3013, MKTG 3413
Electives: Choose 9 hours from the following:
FIN 2643, FIN 2813, FIN 3313, FIN 3603, FIN 3623, MKTG 3433,MKTG 3533, other courses approved by the Chair.
Environmental Science Option ..... 29 hours
Required Courses: AGRC 1214, AGRC 2124, ENSC 2004,CHEM 1364/1361, CHEM 1474/1471
Electives: Choose 19 hours from the following:AGRN 3434, AGRN 3683, AGRN 4223, BIOL 2124,CHEM 2113, CHEM 3334, other courses approved by the Chair.No minor is required for either the Agriculture Business̀ Managementoption or the Environmental Science option.
III. MINOR ..... 18 hours
IV. ELECTIVES TO COMPLETE 128 SEMESTER HOURS REQUIRED FOR GRADUATION.

## AGRICULTURE COURSES (AGRC)

## 1123 LIVESTOCK FEEDING, 3 hours credit

An elementary study of livestock feeding problems. The selection and preparation of feeds for the different classes of livestock. Practical feeding methods, balancing rations for various kinds of livestock. Lecture 3 hours.

## 1124 INTRODUCTION TO ANIMAL SCIENCE, 4 hours credit

Species adaptability, product standards and requirements, areas and types of production, processing and distribution of products; (includes meat animals, dairy and poultry). Lecture 3 hours, laboratory 2 hours.

1214 INTRODUCTION TO PLANT SCIENCE, 4 hours credit
Factors determining growth, distribution, culture, improvement and utilization of economic plants. Lecture 3 hours, laboratory 2 hours.

## 1334* INTRODUCTION TO AGRICULTURE ECONOMICS, 4 hours credit

A study of economic principles as they relate to the national economy, production, marketing and consumption of agricultural products. Lecture 4 hours.

## 2124* FUNDAMENTALS OF SOIL SCIENCE, 4 hours credit

A general course dealing with the origin, chemical, physical, and biological properties of soils in relation to plant growth, engineering and environmental uses. Lecture 3 hours, laboratory 2 hours. Prerequisite: CHEM 1004 or equivalent.

## 2423 COMPUTERS IN AGRICULTURE, 3 hours credit

An introduction to the uses of microcomputers in agricultural decision-making and management. Hardware selection, agricultural application programs, and multipurpose software such as electronic spreadsheets, data-based management packages, national data networks, and word processing will be studied as applied to the agricultural industry. Lecture 1 hour, laboratory 4 hours.

## 3303 PRINCIPLES OF AGRICULTURAL MARKETING, 3 hours credit

Analysis of the marketing system; its importance to the economy and the role of the individual firm. Understanding of basic concepts, problems, and decision aids is emphasized. Lecture 3 hours. Prerequisite: AGRC 1334.

## 3413 FARM AND RANCH MANAGEMENT, 3 hours credit

Production planning with budgeting, market planning, financial records, and income tax management for the individual farm-ranch business. Lecture 2 hours, laboratory 2 hours. Prerequisite: AGRC 1334.

## 4112 PRACTICUM, 2 hours credit

The practical application of selected technical agricultural competencies with emphasis on those that are important for prospective teachers of vocational agriculture. The development of individual competencies in technical agriculture, excluding agricultural mechanics. Laboratory 4 hours. Prerequisites: AGRC 1124, 1214, 2124.

## 4321-4 SPECIAL STUDIES IN AGRICULTURE, 1 -4 hours credit

Independent study based on the review of literature, laboratory problems, or field investigations.

## 4571-2 AGRICULTURAL SEMINAR, 1-2 hours credit

Review and discussion of current research papers, research work and problems in agriculture. Lecture 2 hours. Prerequisite: Senior standing.

## AGRICULTURAL MECHANICS COURSES (AGMC)

## 1413 INTRODUCTION TO MECHANIZED AGRICULTURE, 3 hours credit

The use of power, machines and engineered systems for production and utilization of agriculture products. Lecture 2 hours, laboratory 2 hours.

## 2002 CONSERVATION SURVEYS AND TECHNOLOGY, 2 hours credit

Use of the farm level; mechanical methods of erosion control including terracing and farm pond planning. Lecture 1 hour, laboratory 2 hours.

3123 AGRICULTURAL CONSTRUCTION SKILLS AND PROCESSES, 3 hours credit
Fundamental principles and basic skills in Agricultural Mechanics, including wood construction, concrete, masonry, power tools, numbering and plan reading. Lecture 2 hours, laboratory 3 hours. Prerequisites: Junior standing or permission of instructor.

## 3152 ELECTRICITY IN AGRICULTURE, 2 hours credit

Electricity applied to the farm and rural home including farmstead distribution and use and National Electrical Code requirements. Laboratory activities include simple circuits, practical wiring, home wiring, planning, electric motors, water systems and controls. Lecture 1 hour, laboratory 2 hours. Prerequisites: MATH 1513 or equivalent.

## 3172 MECHANIZED FEED HANDLING, 2 hours credit

The planning and selection of feed and grain handling systems for agricultural production and processing agricultural products including functional, environmental and structural requirements. Laboratory activities include materials selection, farmstead and feedlot layouts. Lecture 1 hour, laboratory 3 hours. Prerequisites: MATH 1513 or equivalent.

## 3223 AGRICULTURAL MECHANICS SKILLS, 3 hours credit

Subject matter and skills used in teaching agricultural mechanics such as fundamental hot and cold metal working, plumbing, welding applications and selection of materials applicable to agriculture. Lecture 2 hours, laboratory 3 hours. Prerequisites: Junior standing or permission of instructor.

## 4203 DRAINAGE AND IRRIGATION PRINCIPLES, 3 hours credit

Sources, measurement and efficient use of irrigation water. Selection of pumping plants and power units. Layout and management of irrigation systems. Lecture 2 hours, laboratory 2 hours. Prerequisites: MATH 1513 or equivalent and AGMC 2002.

## 4702 TRACTOR PRINCIPLES, 2 hours credit

The principles, operation, performance, maintenance and management of tractors. Gasoline and diesel engines will be studied. Laboratory activities involve engines, power trains, hydraulic systems, electrical systems and tractor performance. Laboratory 4 hours. Prerequisite: Junior standing or permission of instructor.

## 4802 MACHINERY MANAGEMENT AND SYSTEMS PLANNING, 2 hours credit

Identification and utilization of variables in agricultural production systems. Determination of optimum size and combinations of equipment layout and selection of equipment for efficient production. Lecture 2 hours. Prerequisite: AGMC 4702.

## AGRONOMY COURSES (AGRN)

## 3213 FORAGE, RANGE, AND PASTURE CROPS, 3 hours credit

Principles of production management, utilization, and improvement of forages for livestock. Lecture 3 hours. Prerequisites: AGRC 1214 and junior standing.

## 3312 CROP SCIENCE LABORATORY, 2 hours credit

Application of principles of field crop science in laboratory and field to include seed and plant identification, implement calibration, and field research techniques. Laboratory 4 hours. Prerequisites: Concurrent enrollment in AGRN 3213, 3523, 4123, or 4673.

## 3434* SOIL MORPHOLOGY, GENESIS, AND CLASSIFICATION, 4 hours credit

Taxonomy of Soils. A study of the internal differentiating characteristics of soils and their causal processes; the U. S. comprehensive system of soil classification; soil survey techniques. Lecture 3 hours, laboratory 2 hours. Prerequisites: AGRC 2124 and Junior standing.

## 3513 FIBER AND OILSEED CROPS, 3 hours credit

Principles of Fiber and oilseed crop production, distribution, classification, and improvement. Lecture 3 hours. Prerequisites: AGRC 1214 and Junior standing.

3683 SOIL PHYSICAL PROPERTIES, MANAGEMENT, AND CONSERVATION, 3 hours credit Identification, description, maintenance and management of soil physical properties. Management and conservation of soil resources. Lecture 2 hours, laboratory 2 hours. Prerequisite: AGRC 2124.

## 4123* PRINCIPLES OF PLANT PHYSIOLOGY, 3 hours credit

Functions, nutrition, metabolism, and development of higher plants, including water relations, photosynthesis, respiration and growth. Cross-listed as BIOL 4163. Lecture 3 hours. Prerequisite: AGRC 1214 or BIOL 1114.

## 4223 PESTICIDES, 3 hours credit

Identification, distribution, characteristics, and methods of controlling pests. Lecture 3 hours. Prerequisites: CHEM 1004 and AGRC 1214.

## 4234* SOIL FERTILITY AND MANAGEMENT, 4 hours credit

Mineral nutrition of plants grown in soil. Soil forms of elements essential for plant growth, factors affecting their availability to higher plants, and their chemical/biological transformations in the soil. Evaluation of soil fertility; fertilizer manufacture and use. Lecture 3 hours, laboratory 2 hours. Prerequisites: AGRC 2124 and Junior standing.

## 4673 GRAIN CROPS, 3 hours credit

Principles of grain crop production, classification, and improvement. Lecture 3 hours. Prerequisites: AGRC 1214 and Junior standing.

## ANIMAL SCIENCE COURSES (ANIM)

## 3102 LIVESTOCK EVALUATION, 2 hours credit

Instruction in selection, evaluating, fitting, showing, and judging of livestock. Laboratory 4 hours.

## 3112 ADVANCED LIVESTOCK EVALUATION, 2 hours credit

This course is a continuation of ANIM 3102. Laboratory 4 hours. Prerequisite: ANIM 3102.

## 3133 BREEDS OF LIVESTOCK, 3 hours credit

Study of the origin, history, development and characteristics of livestock breeds and of the specific purposes of each breed. Lecture 3 hours. Prerequisite: AGRC 1124.

## 3653 APPLIED NUTRITION, 3 hours credit

Basic principles of animal nutrition including composition, characteristics, digestion, absorption, and metabolism of various feedstuffs and ration additives, qualitative and quantitative nutrient requirements of each of the classes of livestock, formulation of rations for each of the classes of livestock. Lecture 2 hours, laboratory 2 hours. Prerequisites: AGRC 1124 and CHEM 1364/1361.

## 4113 BEEF CATTLE SCIENCE, 3 hours credit

Application of scientific principles and recent advances to the production, feeding, breeding, management, and marketing of commercial and purebred cattle. Lecture 2 hours, laboratory 2 hours. Prerequisites: ANIM 3653,4434 and senior standing.

## 4123 SWINE SCIENCE, 3 hours credit

The application of genetics, physiological, nutritional and engineering principles to the efficient production of swine. Swine evaluation and marketing. Lecture 2 hours, laboratory 2 hours. Prerequisites ANIM 3653 and ANIM 4434.

## 4133 SHEEP SCIENCE, 3 hours credit

Breeding, feeding, management, and marketing of commercial and purebred sheep. Lecture 2 hours, laboratory 2 hours. Prerequisites: ANIM 3653, and ANIM 4434.

## 4333* PHYSIOLOGY OF DOMESTIC ANIMALS, 3 hours credit

The comparative physiology of digestion, circulation, production, reproduction and environment of farm animals. Lecture 3 hours. Prerequisites: CHEM 1004 and AGRC 1124.

## 4423 LIVESTOCK DISEASES AND SANITATION, 3 hours credit

The recognition and study of common diseases and parasitic infestations together with their prevention and control in domestic animals. Lecture 3 hours. Prerequisite: AGRC 1124.

## 4434 ANIMAL REPRODUCTION, 4 hours credit

Physiological processes of reproduction in farm animals, gonadal function, endocrine relationships, fertility, and factors affecting reproduction efficiency. Emphasis is given to principles of artificial insemination in the laboratory. Lecture 3 hours, laboratory 2 hours. Prerequisite: AGRC 1124 and Junior standing.

## EARTH SCIENCE COURSE (ESCI)

## 1135* EARTH SCIENCE, 5 hours credit

A survey of earth and environmental sciences including topics selected from geology, meteorology, climatology, oceanography, and astronomy. Lecture 4 hours, laboratory 2 hours.

## ENVIRONMENTAL SCIENCE COURSE (ENSC)

## 2004 INTRODUCTION TO ENVIRONMENTAL SCIENCE, 4 hours credit

An introductory course that emphasizes the impacts of increasing human populations and resource consumption patterns on the world's atmosphere, soils, oceans, agricultural and native land based ecosystems, biological diversity, and the health and welfare of humans. Themes and means of sustainable development and uses of resources, environmental policy, and global change are repeated throughout the course. Lecture 4 hours.

## HORTICULTURE COURSES (HORT)

## 2102 HORTICULTURAL SCIENCE, 2 hours credit

Study of the science and practices underlying the occupational areas in horticulture, including a survey of structures, equipment, growing media, production techniques, and marketing techniques which relate to the specialized career areas in the horticulture industry. Lecture 2 hours. Prerequisite: BIOL 1004 or above.

## 3115 IDENTIFICATION AND USE OF ORNAMENTAL PLANTS, 5 hours credit

An in-depth study of the landscape uses and characteristics of trees, shrubs, vines, and ground covers. Emphasis on identification, ornamental value, growth habits, landscape uses and limitations of various plants. Identification and uses of some herbaceous and exotic plants will be included. Lecture 3 hours, laboratory 4 hours. Prerequisites: HORT 2102 and BIOL 1004 or above.

## 3213 PROPAGATION OF ORNAMENTAL PLANTS, 3 hours credit

The investigation of sexual and asexual methods for propagating ornamental plants. Special emphasis on practical applications of propagating plants, from seeds and cuttings and by grafting, budding, and layering techniques. Lecture 2 hours, laboratory 2 hours. Prerequisite: AGRC 1214 and HORT 2102.

## 4204 GREENHOUSE PRODUCTION, 4 hours credit

Examines practices related to the production of major floricultural crops. Consideration of production requirements, environmental management, cultural techniques, and business procedures which affect the production of greenhouse crops. Lecture 3 hours, laboratory 2 hours. Prerequisites: HORT 3213 and HORT 2102.

## 4313 NURSERY OPERATIONS AND PRODUCTION, 3 hours credit

A study of the nursery industry including container and field production of landscape plants. Emphasis on soil and media selections, use of fertilizers, pest control, control of plant environments and development of watering systems. Grading and selection of plants, nursery organization and scheduling, and marketing techniques will be included. Lecture 2 hours, laboratory 2 hours. Prerequisites: HORT 3213, HORT 3115, and AGRC 2124.

## 4413* LANDSCAPE DESIGN, 3 hours credit

The development of landscape designs and plans. Emphasis on landscape analysis, small landscape plans, effective use of plant materials and structural features in the landscape. Lecture 1 hour, laboratory 4 hours. Prerequisites: HORT 3115 and AGMC 2002. CAD 1013 recommended.

4453 LANDSCAPE DEVELOPMENT AND MAINTENANCE, 3 hours credit
Landscape development and maintenance operations with emphasis on the planting and care of plants and turf areas in small scale landscapes. Lecture 2 hours, laboratory 2 hours. Prerequisites: HORT 2102 and AGRC 2124.

* Liberal arts and sciences course.


## DEPARTMENT OF Biological sciences

CHAIR - Gabriela Adam-Rodwell, Assistant Professor Associate Professor: Guthridge<br>Assistant Professors: Dunn, Frisby, R. Gaines, Heger, Husak<br>Instructors: L. Gaines, Hutchison, Sanders

The study of biology provides an understanding of living things in the world around us. Biologists examine life at the ecosystem, community, population, organismal, cellular, and molecular levels in their attempt to understand the mechanisms involved in the development, evolution, and interrelationships between organisms at these various levels. The department offers the Bachelor of Science Degree in biology, biology education, and medical technology.

## BACHELOR OF SCIENCE DEGREE MAJOR IN BIOLOGY (310)

There are five areas of concentration within the biology program. The biology concentration offers a broad introduction to the field without specialization in a particular area. This area of concentration is designed for individuals with a wide interest in biology. Concentrations in zoology or botany focus on animal and plant biology, respectively. These field-oriented areas are also for individuals interested in wildlife management, ecology, the environment, and related fields. The cellular/molecular biology concentration provides introduction to these exciting areas of modern biology and their importance in many facets of biological and biomedical research. The professional concentration is for those interested in attending a professional school upon completion of their bachelors program. This includes prospective physicians and dentists, veterinarians, and those interested in research careers in the biomedical sciences. All areas of concentration prepare the student for entry into masters and doctoral graduate programs throughout the country.

Biology is also an appropriate major for those interested in allied health areas such as physical therapy, occupational therapy, physician assistant programs, etc. While these programs must be pursued elsewhere, Cameron University can provide the prerequisite course work.

50 hours
I. GENERAL EDUCATION REQUIREMENT ....................
General Education requirements are found on the red striped pages.
II. MAJOR .................................................. 46 hours

Required Courses (all ares of cencentration) ...................... 22 hours
BIOL 1364, BIOL 1474, BIOL 2144, BIOL 2154, BIOL 3014, BIOL 4902

## Biology Concentration

Requisites
12 hours
BIOL 3054 or BIOL 3074, BIOL 3064, BIOL 3154

## Botany Concentration

Requisites
12 hours
BIOL 3054 or BIOL 4054, BIOL 3154 or BIOL 4163, BIOL 3064

Cell/Molecular Concentration ..... 12 hours
RequisitesBIOL 3154, BIOL 3174, BIOL 4174
Professional Concentration ..... 12 hoursRequisitesBIOL 3034 or BIOL 3094 or BIOL 3124, BIOL 3154, BIOL 4004
Electives (all areas of concentration)12 hoursBiology electives to complete the major.
III. MINORIV. ADDITIONAL REQUIREMENTS
Biology MajorMATH 1513 and 1613 (high school trigonometry course may substitute for
MATH 1613)
CHEM 1364/1361 and 1474/1471, CHEM 3314 and 3324
PHYS 1115 (or 2015) and 1215 (or 2025)
V. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION
BACHELOR OF SCIENCE DEGREE MAJOR IN BIOLOGY EDUCATION (315)
I. GENERAL EDUCATION REQUIREMENT ..... 50 hours
General Education requirements are found on the red striped pages. This degree requires specific courses for general education. Please check with the department for these requirements.
II. MAJOR ..... Minimum of 74 hours
Required Core Courses ..... 41 hoursBIOL 1474, BIOL 2144, BIOL 2154, BIOL 2034, BIOL 2134,BIOL 2124, BIOL 3014, BIOL 3044, BIOL 4122, BIOL 4772,CHEM 1474/1471
Required Education Courses ..... 33 hours
EDUC 1800, EDUC 3003, SPED 3103, EDUC 3733, EDUC 3753*,
EDUC 3673, EDUC 4653*, EDUC 4313*, EDUC 3612**,
*Restricted to those students who have been admitted to Teacher Education. See page 52 of this catalog or the undergraduate education advisor for admission requirements.

**Courses taken during professional semester.

## III. ADDITIONAL REQUIREMENTS

Biology Education candidates must achieve a grade of C or better in all major courses (required core courses and required education courses) in order to receive credit toward a degree. If a grade of $\mathrm{D}, \mathrm{F}$, or U is achieved, the course must be repeated.

Biology Education candidates must demonstrate foreign language proficiency (listening and speaking) at the novice-high level as defined by the American Council on the Teaching of Foreign Languages by passing a Department of English and Foreign Languages proficiency test or by taking a foreign language course.

## Teacher Licensure/Certification

The student who completes the requirements for this degree and passes the state tests for certification in Biology will be eligible to apply for a standard teaching license.

## BACHELOR OF SCIENCE DEGREE MAJOR IN MEDICAL TECHNOLOGY (570)

Medical technologists work primarily in hospital laboratories (clinical chemistry, microbiology, blood banking, immunology, etc.). The bachelors program in medical technology consists of three academic years of course work at Cameron (see below) and a year of work under the direction of hospital personnel at any hospital approved by the National Accrediting Agency for Clinical Laboratory Science.
I. GENERAL EDUCATION REQUIREMENT ..... 50 hours General Education requirements are found on the red striped pages.
II. MAJOR ..... 78 hours
Required Courses ..... 68 hours
Biology ..... 20 hours
BIOL 1474, BIOL 3014, BIOL 3094, BIOL 3154, BIOL 4004
Chemistry ..... 18 hoursCHEM 1225 or CHEM 1474/1471, CHEM 2113, CHEM 2232,CHEM 3314, CHEM 3324
Medical Technology 30 hours
MT 4117, MT 4125, MT 4236, MT 4246, MT 4325, MT 4351
Electives ..... 10 hoursElectives must be selected and advisor approved from BIOL,CHEM, MATH, and/or PHYSICS.
III. ADDITIONAL REQUIREMENTS BIOL 1364, CHEM 1364/1361 (or 1015), MATH 1513

## BIOLOGY COURSES (BIOL)

## 1004* GENERAL BIOLOGY, 4 hours credit

A life science laboratory course for non-science majors. Students should learn the principles of cell structure/function, genetics, evolution and organismal diversity, ecology, and the scientific method. Such principles will be applied in discussions of biotechnology, conservation of biodiversity and natural resources, human population growth, and global environmental changes. Not applicable to Biology major or minor or Medical Technology major. Lecture 3 hours, laboratory 2 hours.

## 1114* GENERAL BOTANY, 4 hours credit

An introduction to the structure, life processes and reproduction of the seed-bearing plants and their relation to the environment. Lecture 3 hours, laboratory 2 hours. Not applicable to Biology or Medical Technology major or minor.

## 1124* GENERAL ZOOLOGY, 4 hours credit

A survey and classification of the animal kingdom stressing the animals from the simple to the complex; to develop an appreciation of animal life as it relates to human understanding and welfare. Lecture 3 hours, laboratory 2 hours. Not applicable to Biology or Medical Technology major or minor.

## 1364* PRINCIPLES OF BIOLOGY I, 4 hours credit

An introduction to the physical, chemical and biological principles associated with life from the subcellular to ecosystem level. Lecture 3 hours, laboratory 3 hours.

## 1474* PRINCIPLES OF BIOLOGY II, 4 hours credit

A continuation of BIOL 1364. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1364.

## 2012 MEDICAL TERMINOLOGY, 2 hours credit

An introduction to the prefixes, roots, and suffixes used to construct medical terms. A systems approach will be used to survey the basic anatomy and physiology of the human body, followed by selected terms defining the pathology, diagnostic procedures, and treatment procedures of each system. Emphasis will be on learning to pronounce, spell, and define all terms. Lecture 2 hours.

## 2034* HUMAN ANATOMY, 4 hours credit

Introductory anatomy with emphasis on histology and human gross anatomy. Lecture 3 hours, laboratory 3 hours. Prerequisite: Departmental permission. Not applicable to Biology or Medical Technology major or minor. Will not satisfy General Education science requirements.

## 2044* BIOLOGICAL TECHNIQUES, 4 hours credit

Theoretical and practical considerations of laboratory skills required for biological experimentation and medical technology. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1474.

## 2121-2 SPECIAL STUDIES, 1-2 hours credit

Selected topics in biology which may include lecture, laboratory and/or field trips. Will not satisfy General Education science requirements. May be repeated for a maximum of 3 credit hours.

## 2124* INTRODUCTION TO MICROBIOLOGY, 4 hours credit

A survey of the principles and techniques of microbiology with emphasis on disease prevention and health maintenance. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHEM 1364 and CHEM 1361. Not applicable to Biology or Medical Technology major or minor. Will not satisfy General Education science requirements.

## 2134* HUMAN PHYSIOLOGY, 4 hours credit

Emphasis is on concepts and principles that serve as a foundation for understanding human physiology. Laboratory experiences demonstrate physiological mechanisms and serve as a basis for understanding clinical applications of physiology. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 2034, CHEM 1364 and CHEM 1361. Not applicable to Biology or Medical Technology major or minor. Will not satisfy General Education science requirements.

## 2144* BOTANY, 4 hours credit

A survey of the plant kingdom stressing structure, function, life histories, and ecology. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1474.

## 2154* ZOOLOGY, 4 hours credit

A phylogenetic and comparative survey of the animal kingdom that treats evolutionary, ecological, zoogeographical and morphological aspects of each phylum. Emphasis is on classification as it reflects
evolutionary adaptation. Economic impact of wild animals on society and natural resource conservation are considered. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1474.

## 2444* ENVIRONMENT AND MAN, 4 hours credit

The application of ecological concepts and principles to concerns such as human population growth, resource management, and pollution. Lecture 3 hours, laboratory 3 hours. Prerequisite: one course in Biological Sciences. Will not satisfy General Education Requirements.

## 3004* PHYCOLOGY, 4 hours credit

Morphology, classification and ecology of the fresh water algae. Lecture 3 hours, laboratory 3 hours and field trips. Prerequisite: BIOL 2144.

## 3014* PRINCIPLES OF GENETICS, 4 hours credit

A general course in the cellular and molecular mechanisms of heredity. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 2144 or BIOL 2154 and CHEM 3314 or concurrent enrollment.

## 3024* ENTOMOLOGY, 4 hours credit

Structure, life history, and recognition of common insects. Lecture 3 hours, laboratory 3 hours, field trips. Prerequisite: BIOL 2154.

## 3034* DEVELOPMENTAL BIOLOGY, 4 hours credit

The development of the vertebrate body from gametogenesis through early organ formation. Primary emphasis on development of fish, frog, chick and pig. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 3014.

## 3044* EVOLUTION, 4 hours credit

Historical development of evolutionary concepts. Theories to account for speciation, evolutionary mechanisms and phylogenetic relationships. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 3014.

## 3054* PLANT TAXONOMY, 4 hours credit

Classification of flowering plants with emphasis on the flora of the area. Lecture 3 hours, laboratory 3 hours, and field trips. Prerequisite: BIOL 2144.

## 3064* ECOLOGY, 4 hours credit

General principles of biotic and abiotic interrelationships including sampling techniques, productivity, energy flow, interspecific association and biomes. Field trips arranged. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2144 or BIOL 2154.

## 3074* NATURAL HISTORY OF THE VERTEBRATES, 4 hours credit

Ecology, taxonomy and life histories of vertebrates. Lecture 3 hours, laboratory 3 hours. Field trips arranged. Prerequisite: BIOL 2154.

## 3084* ORNITHOLOGY, 4 hours credit

Identification, ecology, distribution and population dynamics of birds, with emphasis on locally occurring species. Family and ordinal characters are stressed. Lecture 3 hours, laboratory 3 hours. Field trips arranged. Prerequisite: BIOL 2154.

## 3094* IMMUNOLOGY, 4 hours credit

Nature and mechanisms of natural and acquired resistance including humoral and cellular immunity. Characteristics of antigens and antibodies and of their interaction; transplantation reactions and hypersensitives. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 3014.

## 3104* COMPARATIVE VERTEBRATE ANATOMY, 4 hours credit

Functional morphology and evolution of organ systems in representative chordates. This course emphasizes bioméchanics and environmental adaptation, and fulfills the needs of preprofessionals and biology majors. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154.

## 3114* MAMMALOGY, 4 hours credit

Classification, life histories, and distribution of mammals. Methods of collection and preservation. Lecture 3 hours, laboratory 3 hours. Field trips arranged. Prerequisite: BIOL 2154.

## 3124* HISTOLOGY, 4 hours credit

Structure of animals at tissue and organ levels with emphasis on recognition and function of mammalian tissues and organs. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1474. BIOL 3104 is recommended.

## 3134* INVERTEBRATE ZOOLOGY, 4 hours credit

Morphology, taxonomy, natural history, and evolutional relationships of the invertebrates. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154.

## 3154* PRINCIPLES OF MICROBIOLOGY, 4 hours credit

A comprehensive course emphasizing the biology, biochemistry, physiology and genetics of microorganisms, especially the bacteria. Laboratory deals with the distribution, cultivation and identification of microorganisms. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 2144 or BIOL 2154 and CHEM 3324 or concurrent enrollment.

## 3174* CELL BIOLOGY, 4 hours credit

Structural and functional organization of cells in terms of their organelles, molecules, and control mechanisms. The cell cycle, cellular differentiation and cellular interactions are also considered. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 2144 or BIOL 2154 and CHEM 3314 or concurrent enrollment.

## 4004* PHYSIOLOGY, 4 hours credit

Homeostatic mechanisms of human organ systems are emphasized, including some aspects of comparative physiology. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 3104 and CHEM 3324. CHEM 4403 is recommended.

## 4014* HERPETOLOGY, 4 hours credit

Taxonomy, distribution, natural history of amphibians and reptiles with emphasis on local forms. Techniques of collection and preservation. Field trips arranged. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154.

## 4024* ICHTHYOLOGY, 4 hours credit

Taxonomy, morphology and ecology of fishes, with emphasis on local forms. Techniques of collection and preservation. Field trips arranged. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154.

## 4054* VASCULAR PLANT MORPHOLOGY, 4 hours credit

Morphology, evolution and ecology of vascular plants. Field trips arranged. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2144. .

## 4064* ADVANCED ECOLOGY, 4 hours credit

Ecological principles as related to population dynamics, ecosystems, effects of radiation and pollution. Emphasis on production, energy flow, and cycling within ecosystems. Lecture 3 hours, laboratory 3 hours. Field trips arranged. Prerequisite: BIOL 3064.

## 4084* ANIMAL BEHAVIOR, 4 hours credit

Behavioral adaptations of diverse animal species. Emphasis is placed on the ecological, physiological, and evolutionary aspects of behavior. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154.

## 4094* LIMNOLOGY, 4 hours credit

An introduction to the biological, chemical, and physical features of freshwater lakes, ponds, and streams, with emphasis on methods. Field trips arranged. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 2144 and BIOL 2154 and CHEM 1474 and CHEM 1471.

## 4104* HISTORY AND LITERATURE OF BIOLOGY, 4 hours credit

The development of biological science through the classical and modern periods. The use of the library as a research tool, and familiarization with library resources. Lecture 3 hours, laboratory-library 3 hours. Prerequisite: BIOL 2144 and BIOL 2154.

## 4114* MEDICAL MICROBIOLOGY, 4 hours credit

Host-parasite relationships of medical importance and the principles of infection and immunity with special emphasis on the isolation and identification of pathogenic bacteria. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 3154 and BIOL 3094.

## 4121-4 SPECIAL STUDIES, 1-4 hours credit

Term paper and/or oral examination required. Prerequisite: Departmental permission..

## 4154* BIOMETRY, 4 hours credit

An introduction to the application of basic probability theory, descriptive statistics, and statistical inference, including estimation and hypothesis testing, to biological data. Analysis of variance and regression analysis of simple experimental designs are also considered. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 2144 and BIOL 2154.

## 4163* PRINCIPLES OF PLANT PHYSIOLOGY, 3 hours credit

Functions, nutrition, metabolism, and development of higher plants, including water relations, photosynthesis, respiration and growth. Cross-listed as AGRN 4123. Prerequisite: AGRC 1214 or BIOL 2144.

## 4174* MOLECULAR BIOLOGY, 4 hours credit

Emphasis is on the informational macromolecules (nucleic acids and proteins) associated with life processes, including their synthesis, genetics, regulation, and mechanism of action. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 3014 and BIOL 3174 and CHEM 3324. CHEM 4413 recommended.

## 4772 TEACHING OF BIOLOGY, 2 hours credit

Methods and materials in secondary education. Lecture 2 hours. Taught during fall semester only. Teacher Certification students must be admitted to teacher education prior to enrollment in this course.

## 4881 BIOLOGY SEMINAR, 1 hour credit

A general seminar course for biology majors. May be repeated for a maximum of 2 credit hours. Prerequisite: Departmental permission.

## 4902* BIOLOGY CAPSTONE COURSE, 2 hours credit

Required of all biology majors for graduation. Course serves to integrate the biology curriculum, enhance critical analysis skills, promote leadership and an appreciation of ethical and philosophical considerations, and hone modern communication skills. Program assessment is also a component. Prerequisites: Senior standing in biology, BIOL 3014, and departmental permission.

## MEDICAL TECHNOLOGY COURSES (MT)

## 4117 CLINICAL MICROBIOLOGY, 7 hours credit

The theory and laboratory study of pathogenic bacteria, viruses, rickettsiae, fungi and parasites. Includes isolation, identification, antimicrobial susceptibility testing, and medical significance. Departmental permission required. Lecture/laboratory.

## 4125 CLINICAL CHEMISTRY, 5 hours credit

The theory and laboratory methodology of analytical biochemistry, clinical microscopy, routine and special procedures and medical significance. Departmental permission required. Lecture/laboratory.

## 4236 CLINICAL HEMATOLOGY, 6 hours credit

Systematized study of disease and abnormal derivation, maturation and function, principles of homeostasis; methodology used in routine and special hematology studies; and correlation of hematological findings with physiological conditions. Departmental permission required. Lecture/ laboratory.

## 4246 CLINICAL IMMUNOLOGY, 6 hours credit

The theory of immunologic responses and procedures used in serological determinations; the study of immunohematology, fundamentals of antigen-antibody reactions, blood groups and types, compatibility testing, blood components, and the laboratory methods used as they relate to the medical significance of immunology and infectious disease. Departmental permission required. Lecture/laboratory.

## 4325 CLINICAL CHEMISTRY II, 5 hours credit

The theory and laboratory methodology of analytical biochemistry, instrumentation, and lab mathematics, routine and special procedures and medical significance. Departmental permission required. Lecture/laboratory.

## 4351 TOPICS IN MEDICAL TECHNOLOGY, 1 hour credit

Principles and practices of the medical laboratory including basic management, special education methodology, and special projects in selected areas. Departmental permission required. Lecture/laboratory.

[^8]
## DEPARTMENT OF

# Computing And TECHNOLOGY 

CHAIR - Johnny Carroll, Associate Professor<br>Associate Professors: Moinian, Russell, Sutherlin, Zhao<br>Assistant Professors: Merritt, Penick, Raborn<br>Instructors: Jan Carroll, D. Smith, K. Smith

The Department of Computing and Technology provides Associate in Applied Science degrees in Computer Aided Design Drafting, Computer Information Systems, Electronic Engineering Technology, Information Technology, and Applied Technology. Bachelor of Science Degrees are offered with studies in Computer Science, Computer Information Systems, Electronic Engineering Technology, Engineering Design Technology, Information Technology, and Technology. Preprofessional course offerings are provided for students who want to transfer to architecture and aerospace, civil, electrical, or mechanical engineering programs.

Students who have completed an Associate in Applied Science Degree from any regionally accredited college or university may use the technical specialty portion of that degree toward the MAJOR-MINOR requirement for the B.S. degree in Technology at Cameron.

## BACHELOR OF SCIENCE DEGREE PROGRAMS

Baccalaureate degree programs are designed to provide students with advanced theoretical and/or technical expertise, prepare students for supervisory or managerial positions, and prepare students to be successful in graduate school. Program requirements are flexible to allow students to select courses to meet individual goals or respond to employment trends in emerging technology areas.

## BACHELOR OF SCIENCE DEGREE MAJOR IN COMPUTER SCIENCE (415)

Computer Science is the study of computer technology, including hardware and software. It includes the systematic study of computing systems and computation. The body of knowledge resulting from this discipline contains theories for understanding computing systems and methods; design methodology, algorithms, and tools; methods for the testing of concepts; methods of analysis and verification; and knowledge representation and implementation. A student graduating with this degree can easily move into industry or pursue graduate studies.

[^9]Electives 3 hours
CS 3343, CS 3443, CS 3573, CS 4013, CS 4223
III. ADDITIONAL REQUIREMENTS ..... 16 hours
All computer science majors must complete the four courses listed below.
Some students may also need to take some or all of the courses MATH 0013, Pre-Algebra, MATH 0103, Beginning Algebra, MATH 0213 Intermediate Algebra, MATH 1513 College Algebra, MATH 1613 Plane Trigonometry or MATH 1715 College Algebra and Trigonometry as prerequisites. MATH 2215, MATH 2235, MATH 4433, STAT 3013
IV. MINOR 19-21 hours
V. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.
BACHELOR OF SCIENCE DEGREE MAJOR IN ELECTRONIC ENGINEERING TECHNOLOGY (413)

The Bachelor of Science with a major in Electronic Engineering Technology builds upon the AAS curriculum and includes instruction in advanced electronics equipment and systems applications as used in industrial controls, computers, and telecommunications. Supervision and management focused courses prepare the graduate for advanced career opportunities as a technologist.
I. GENERAL EDUCATION REQUIREMENT ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR-MINOR ..... 72-75 hours
Technical Specialty Core Courses ..... 39 hours
EET 1013, EET 1023, EET 1053, EET 2013, EET 2023, EET 2133, EET 2193, EET 2243, EET 2263, EET 3333, EET 3473, EET 4813, and one of EET 3133, EET 4343 or EET 4233
Technology Core Courses ..... 12 hours
TECH 3013 (Required), Select 9 hours from: TECH 3033, TECH 4003, TECH 4023, TECH 4033, TECH 4143, TECH 4153, TECH 4491-3
Upper Division Courses ..... 9 hours
BUS 3213, COMM 3383, MGMT 3013
Additional advisor approved upper division courses selected to compliment the student's goals and objectives.
Required Support Courses ..... 12-15 hours
MATH 1613 (Required), MATH 2713 or MATH 2215 ,CAD 1013 or PHYS 1004, CIS 2013 or CIS 2023
Technology approved support courses selected to compliment thestudent's goals and objectives.
III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.
Please note: Student must complete a minimum of 40 semester hours of upper division courses.

## BACHELOR OF SCIENCE DEGREE MAJOR IN ENGINEERING DESIGN TECHNOLOGY (412)

Students in the Engineering Design program study advanced topics in mechanical design and GISMapping design. Computer assisted engineering projects which enhance the student's analytical and design skills are included in the advanced courses. Students from this program have been placed in engineering level jobs and have been able to progress to supervisory or management levels.
I. GENERAL EDUCATION REQUIREMENT 50 hours General Education requirements are found on the red striped pages.
II. MAJOR-MINOR 67-70 Hours
Technical Specialty Core Courses ..... 30 hours
CAD 1013, CAD 1023, CAD 1073, CAD 2073, CAD 2063, EDT 2103, EDT 3103, EDT 4043, EET 1013, EDT 2053
Technology Core Courses 12 hours
From TECH 3013, TECH 3033 or TECH 4003, TECH 4023, TECH 4033, TECH 4143, TECH 415310-13 hours
Required Support CoursesMATH 1613, MATH 2713 or MATH 2215, PHYS 1115 orPHYS 1004
Specialty Area (CHOOSE ONE) ..... 15 hours
Mechanical Area . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 15 hours
CAD 2093, EDT 2173, EDT 3033, EDT 4013, EDT 4033
GIS/Mapping Area 15 hours
CAD 2123, CAD 2023, EDT 3013, EDT 4013, EDT 4023
III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.

Please Note: Student must complete a minimum of 40 semester hours of upper division courses.

## BACHELOR OF SCIENCE DEGREE MAJOR IN INFORMATION TECHNOLOGY (414)

The Information Technology Bachelors Degree program builds upon knowledge gained in the Associates in Applied Science in Information Technology and it provides new areas of study. Options are available in Computer Information Systems, Management Information Systems, and Information Assurance/Security. Important student outcomes for this program include significant communication and business skills required for success in industry careers.
I. GENERAL EDUCATION REQUIREMENT 50 hours General Education requirements are found on the red striped pages.
II. MAJOR-MINOR ..... 63-64 hours
Core Courses ..... 42 hours
EET 1063, CIS 1013, CIS 2033, IAS 2233, IT 1213, IT 1413, IT 2063IT 2413, CIS 3083, IT 3603, IT 4342, IT 4444, STAT 3013, andTECH 3013
Option
Choose one of the following three options:
Computer Information Systems Option (16 hours)
CIS 2043, CIS 3043, CIS 3064, CIS 3183, CIS 4063
Management Information Systems Option ( 15 hours)MIS 2113, MIS 3033, MIS 3083, MIS 4033, MIS 4533Information Assurance/Security ( 15 hours)IAS 2013, IAS 3063, IAS 3233, IAS 3263, IAS 4063
Guided Electives ..... 6 hours
Choose 6 hours from the following:
TECH 3003, TECH 3033, TECH 4003-6, TECH 4023, TECH 4033, TECH 4143, MGMT 4443, TECH 4491-3
III. GENERAL ELECTIVES ..... 13-14 hours
General Electives to complete 127 hours required for graduation.
TOTAL HOURS ..... 127 hours
BACHELOR OF SCIENCE DEGREE MAJOR IN TECHNOLOGY (410)
The Bachelor of Science with a major in Technology program provides an opportunity for AAS-leveltechnicians from diverse backgrounds to become technologists, supervisors and managers.
I. GENERAL EDUCATION REQUIREMENT ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR-MINOR 60 hours
Core Courses 12 hoursTECH 3013 (Required), Select 9 hours from: TECH 3003,TECH 4003, TECH 4023, TECH 4033, TECH 4143, TECH 4153
Technical Specialty 32 hours
Approved by Department of Technology
Upper Division Courses ..... 16 hoursSelected to complement the student's goals and objectives andapproved by the Department of Computing and Technology.
III. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.
Please Note: Student must complete a minimum of 40 semester hours of upper division courses.

## ASSOCIATE IN APPLIED SCIENCE DEGREE

Associate Degree programs in Applied Science are designed to prepare students for employment requiring expertise in a technical specialty. Graduates of these programs have been successful in obtaining employment in a variety of positions in business, industry and government. Students who successfully complete academic programs at an Oklahoma Department of Career and Technology Education center,
which have been approved through a Cooperative Agreement between a Technology Center and Cameron University, or an Alliance Agreement, may be admitted to the Applied Technology program.

## ASSOCIATE IN APPLIED SCIENCE DEGREE MAJOR IN COMPUTER AIDED DESIGN DRAFTING (530)

Computer aided design and drafting courses prepare students for employment in the current industrial environment. The curriculum is certified by the American Design Drafting Association at the design drafter level. The design courses provide expertise in engineering methods and design decision processes.
I. GENERAL EDUCATION ............................................................. 18 hours


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Selected Electives ...................................................... 9 hours
Behavioral Science or Economics (3 hours); ENGL 1213 or COMM 1113 (3 hours); Humanities (3 hours)
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II. MAJOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $43-44$ hours
A. TECHNICAL CORE COURSES


B. TECHNICAL-OCCUPATIONAL SUPPORT COURSES .......... 10-11 hours
MATH 1513, MATH 1613, PHYS 1115 or PHYS 1004


Mechanical Specialty .......................... 9 hours
CAD 2093, EDT 2173, CAD 2603
GIS/Mapping Specialty ........................ 9 hours
CAD 2023, CAD 2123, CAD 2603
TOTAL
61-62 hours

## ASSOCIATE IN APPLIED SCIENCE DEGREE MAJOR IN APPLIED TECHNOLOGY (595)

This degree is structured to enable a student to incorporate credit for technology skills acquired from military experience and courses at a technology and career center or similar provider of technology training. Students may be required to complete up to 12 semester hours of Cameron University courses before credit for technology component can be placed on the transcript. Active duty miliary personnel are exempt from that requirement.
I. GENERAL EDUCATION REQUIREMENT ..... 18 hours
Communications 6 hours
ENGL 1113 (Required) and ENGL 1213 or COMM 1113
U.S. History ..... 3 hours
HIST 1483 or HIST 1493
U.S. Government 3 hoursPS 1113
Mathematics 3 hours
MATH 1513 or any mathematics course numbered above 1513 and approved for general education
General Education Elective ..... 3 hoursCourse selected from approved general education courses in humanities,communications, English, behavioral science or economics
II. SUPPORT AND RELATED COURSES ..... 12 hours
Courses selected from general education courses in mathematics, physical science or biology or from technology, electronics, or telecommunications electronics
III. TECHNICAL-OCCUPATIONAL SPECIALTY ..... 30 hours
TOTAL . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 60 hours
ASSOCIATE IN APPLIED SCIENCE DEGREE MAJOR IN ELECTRONIC ENGINEERING TECHNOLOGY (540)

Electronic Engineering Technology concepts and applications with emphasis in developing circuitry and test equipment expertise. Electronic Engineering Technology graduates are entry level electronics applications specialists. Typical career paths include computers, telecommunications, electronic controls, manufacturing, and research and development.
I. GENERAL EDUCATION 18 hours
Required Courses ..... 9 hours
ENGL 1113, PS 1113 (6 hours); HIST 1483 or HIST 1493 (3 hours)
Selected Electives ..... 9 hours
Behavioral Science or Economics (3 hours); ENGL 1213 or COMM 1113 (3 hours); Humanities (3 hours)
II. MAJOR ..... 43 hours
A. TECHNICAL SPECIALTY
Electronics ..... 27 hoursEET 1013, EET 1023, EET 1053, EET 2013, EET 2023, EET 2133,EET 2193, EET 2243, EET 2263
B. TECHNICAL-OCCUPATIONAL SUPPORT COURSES ..... 10 Hours CAD 1013, CIS 2013 or CIS 2023, PHYS 1004
C: TECHNICAL-OCCUPATIONAL RELATED COURSE WORK 6 hoursMATH 1513, MATH 1613(NOTE: MATH 1715 plus 1 hour elective will satisfy this requirement)
TOTAL 61 hours
ASSOCIATE IN APPLIED SCIENCE DEGREE MAJOR IN INFORMATION TECHNOLOGY (514)

The Information Technology program is designed to prepare for employment requiring expertise as an information technology specialist. Graduates of this program will be successful in obtaining employment in a variety of positions in business, industry and government.
I. GENERAL EDUCATION REQUIREMENT ..... 18 hours
Required Courses 12 hours
ENGL 1113, ENGL 1213, PS 1113, HIST 1483 or HIST 1493
Selected Electives ..... 6 hours
Behavioral Science or Economics (3 hours)
Humanities (3 hours)
II. MAJOR ..... 45-46 hours
Technical Specialty ..... 24 hours
IT 1213, IT 1413, CIS 2033, IT 2063, IAS 2233, IT 2413, CIS 1013, EET 1063
Option Specialty Courses ..... 9 hours
Courses selected from CIS, MIS, or IASSpecialty (Advisor Approved)
Technical-Occupational Support Courses 6 hours BUS 1113, MATH 1513 or MATH 1813Technical-Occupational Related Courses6 hours
COMM 1113 and one additional course selected to complementthe student's goals and objectives (Advisor Approved)
TOTAL HOURS ..... 63-64 hours

## PRE-PROFESSIONAL PROGRAMS ARCHITECTURE AND ENGINEERING

This is a 2 -year program suggested by the Department of Computing and Technology. It is the responsibility of the STUDENT to contact the college of Engineering at the transfer institution before beginning the second semester at Cameron University. Cameron University cannot guarantee Engineering requirements at the transfer institution.

## TECHNOLOGY

CAD 1013

MATHEMATICS
*MATH 1513, *MATH 1613, MATH 2215, MATH 2235, MATH 2244, MATH 3253

* These lower Mathematics courses may not count toward an Engineering or Architecture degree.

SCIENCE
CHEM 1364, CHEM 1361, CHEM 1474, CHEM 1471, PHYS 2015, PHYS 2025
GENERAL EDUCATION
PSY 1113, HIST 1483 or 1493, PS 1113, HUM 2113 or 2223

## COMPUTER AIDED DRAFTING COURSES (CAD)

## 1013* COMPUTER AIDED DRAFTING, 3 hours credit

The use of computer systems to produce drawings in compliance with industrial standards. Emphasis on computer terminology, drafting practices, procedures, and techniques. Lecture 2 hours, laboratory 2 hours.

## 1023 DESCRIPTIVE GEOMETRY, 3 hours credit

Two dimensional and three dimensional solutions to problems involving points, lines, planes, contoured surfaces and developments. Problems are solved using 2D orthographic projection and 3D solids modeling computer graphics. Lecture 2 hours, laboratory 2 hours. Prerequisite: CAD 1013 or equivalent.

## 1043 RESIDENTIAL ARCHITECTURE, 3 hours credit

The use of computer aided drafting systems to produce residential structure drawings in compliance with industrial standards. Lecture 2 hours, laboratory 2 hours.

## 1073 DESIGNING FOR PRODUCTIVITY, 3 hours credit

Development of working drawings emphasizing the relationship between machine tool operation and product design. An introduction to numerical control, shop practices, foundry procedures, and tool design. Lecture 2 hours, laboratory 2 hours. Prerequisite: CAD 1013 or equivalent.

## 2023 DATA ACQUISITION AND ANALYSIS IN GIS, 3 hours credit

The topics covered in this course include GPS methods of collecting data, refinement, storage and integration with GIS software. Lecture 2 hours, laboratory 2 hours.

## 2063 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS AND GLOBAL POSITIONING SYSTEMS, 3 hours credit <br> An introduction to the field of geographic information systems (GIS) and global positioning systems (GPS). The topics covered include the fundamentals of GIS, its capabilities and applications along with GPS theory and how data is collected, integrated using the GPS receiver. Lecture 2 hours, laboratory 2 hours.

## 2073 SOLIDS MODELING, 3 hours credit

A study of three dimensional drawing techniques on CAD systems and production of data structures used for Computer Aided Manufacturing. Lecture 2 hours, laboratory 2 hours. Prerequisite: CAD 1023.

## 2093 ADVANCED SOLIDS MODELING, 3 hours credit

Designing with 3D solid models. Topics covered will include solving design problems with solid models, using solid models in technical illustrations, performing engineering analysis using solid models, advanced assembly manipulation, and advanced surface creation. Lecture 2 hours, laboratory 2 hours. Prerequisite CAD 2073.

## 2123 SURVEYING, 3 hours credit

Introductory course in surveying and measurement oriented towards construction. Study will include measurement of distance and angles using levels, transit and theodolite. Topics in topographic surveying, property surveying, site layout and construction surveying will be covered. Lecture 2 hours, laboratory 2 hours. Prerequisite: MATH 1613 or concurrent enrollment.

## 2603 COMPUTER-AIDED DESIGN DRAFTING CAPSTONE, 3 hours credit

Capstone course which focuses on design projects developed independently and in consultation with the Instructor. Possible topics covered but not limited to: jig and fixture design, manufacturing applications, parametric modeling, mapping, GIS, and mechanical design. Prerequisite: Departmental permission.

## COMPUTER INFORMATION SYSTEMS COURSES (CIS)

## 1013* INTRODUCTION TO COMPUTER INFORMATION SYSTEMS, 3 hours credit

Survey of the industry; introducing automated data processing with effects on business and society; and survey of hardware and software. Lecture 3 hours.

## 1023* RPG PROGRAMMING, 3 hours credit

Elements of RPG II programming language applied to business applications. Lecture 3 hours.

## 1063* COBOL APPLICATION I, 3 hours credit

Elements of COBOL programming languages applied to business systems. Use of terminals and editor systems will be stressed in the laboratory. Lecture 2 hours/laboratory 2 hours.

## 2001-3 SPECIAL PROBLEMS IN COMPUTER INFORMATION SYSTEMS, 1-3 hours credit

Assigned student projects which will include topics not covered in detail in the CIS curriculum and based on study needs. Laboratory 3-9 hours. Prerequisite: Sophomore standing and departmental permission.

## 2013* VISUAL BASIC PROGRAMMING, 3 hours credit

Elements of VISUAL BASIC programming language. Lecture 3 hours. Prerequisites: CIS 1063 or department permission.

## 2023 BUSINESS APPLICATIONS OF C++, 3 hours credit

Elements of the $\mathrm{C}++$ programming language with emphasis on business applications. Lecture 3 hours. Prerequisite: CIS 1063, or department permission.

## 2033* FUNDAMENTALS OF SYSTEMS ANALYSIS AND DESIGN, 3 hours credit

An in-depth study of the Systems Development Life Cycle (SDLC) to include study, design, development, and operation phases. A total quality management emphasis is stressed and computer assisted systems engineering (CASE) tools are introduced. A project is required to show understanding of topics presented. Lecture 3 hours. Prerequisites: CIS 1013 and one of IT 1213 or CIS 1063.

## 2043 GRAPHIC DESIGN BASICS, 3 hours credit

Basic graphic design theory and development are studied through the use of elements of design and principles of composition as applied to information system processes. Study includes basic color theory with emphasis on using design techniques and software tools to develop graphic outputs for business. Students will develop graphic outputs such as business forms, project covers and inserts, and presentation graphics. Presentations will allow students to showcase their work and improve their presentation skills. Lecture 3 hours. Prerequisite: CIS 1013.

## 2063 COBOL APPLICATIONS II, 3 hours credit

COBOL programming of business systems emphasizing file processing, interactive processing, terminal formats, subprograms, and software validation. Lecture 3 hours. Prerequisites: CIS 1013 and CIS 1063.

## 3011-3 SOFTWARE APPLICATIONS (NAME OF SOFTWARE), 1-3 hours credit

A study of selected commercial software. Emphasis is on implementation, equipment requirements, integration capabilities and limitations of each software application. Course may be repeated for credit with different software packages. Prerequisites: Departmental permission.

## 3043 MANAGING THE INFORMATION TECHNOLOGY CENTER, 3 hours credit

Managing the resources of the modern Information Technology Center. Topics include: Ethics, decision making control cycle, organizational structure, personnel issues, ADA, policies and procedures, and Technology Center evaluation. Lecture 3 hours. Prerequisite: CIS 2033.

## 3064 COBOL PROGRAMMING, 4 hours credit

Elements of COBOL programming language applied to business systems emphasizing file processing, control breaks, interactive processing, sub-programs and data validation. Software quality, use of multidimension tables, sorting and interaction with databases are covered. Lecture 3 hours, laboratory 2 hours.

## 3083 DATABASE, 3 hours credit

Emphasis on design and use of database systems and a comparison to sequential file structures. Lecture 3 hours. Prerequisite: CIS 2063.

## 3093 FOURTH GENERATION LANGUAGES, 3 hours credit

An in-depth study of fourth generation computer languages (4GLs), including general application development, report generation, and query applications. Lecture 3 hours. Prerequisite: CIS 3083 or department permission.

## 3183 STRUCTURED QUERY LANGUAGE, 3 hours credit

An in-depth study of the Structured Query Language (SQL), and relational database processing. Topics will include general application development using basic and advanced select statements. Other topics include queries involving multiple tables. Prerequisite: CIS 3083 and CIS 2023 or departmental permission.

## 4013 DATA WAREHOUSING, 3 hours credit

The strategies and processes for Data Warehousing of large relational databases. Topics include: understanding the role of data warehousing to businesses, understand data warehousing as a management tool, data warehousing as an emerging architecture and a data warehouse as it is designed to support the decision support system (DSS) function. Prerequisite: CIS 3183 or departmental permission.

## 4023 DATA MINING, 3 hours credit

The strategies and processes for Data Mining of large relational databases. The major focus of this course is data mining applications related to the corporate business world. Examples of discussion areas include banking and finance, retail, and heath care. Prerequisite: CIS 3183 or departmental permission.

## 4063 APPLIED PROBLEMS IN CIS, 3 hours credit

An applied problems course to integrate earlier studies in systems and programming into a viable and realistic approach to solving information system problems. Emphasis is placed on logical problem solving through critical thinking. Assignments are designed to simulate realistic information technology center activities from scheduled projects to emergency requests. Lecture 2 hours, laboratory 2 hours. Prerequisites: CIS 3043 and CIS 3183.

## COMPUTER SCIENCE COURSES (CS)

## 1002 INTRODUCTION TO INTERNET, 2 hours credit

An introduction to the resources of Internet. Topics included are electronic mail, file transfers, and methods of accessing information. Does not apply toward a major or minor in Computer Science. Lecture 2 hours. Prerequisite: None.

## 1301* OPERATING SYSTEM UTILITIES I, 1 hour credit

The basic commands of the operating system currently in use. Lecture 1 hour. Corequisite: CS 1313. Prerequisites: None.

## 1313* INTRODUCTION TO COMPUTER SCIENCE I, 3 hours credit

An introduction to an object oriented programming language and its use in solving simple problems. Lecture 3 hours. Corequisite: CS 1301. Prerequisites: MATH 1513, concurrent enrollment in MATH 1513 or departmental permission.

## 1501* OPERATING SYSTEM UTILITIES II, 1 hour credit

Continuation of CS 1301. Lecture 1 hour. Corequisite: CS 1513. Prerequisite: CS 1301.
1513* INTRODUCTION TO COMPUTER SCIENCE II, 3 hours credit
A continuation of CS 1313. Lecture 3 hours. Corequisite: CS 1501. Prerequisite: CS 1313.

## 1523* DISCRETE MATH, 3 hours credit

Fundamental mathematical concepts and algebraic structures. Introduction to the theory of graphs and trees. Emphasis on examples and applications rather than mathematical rigor. Lecture 3 hours. Prerequisites: MATH 1513 and CS 1313 or departmental permission.

2001-3 SEMINAR IN COMPUTER SCIENCE, $1-3$ hours credit
Elementary current topics that are not part of the common core. Lecture 1-3 hours. Prerequisites: Announced prerequisites.

## 2401 OPERATING SYSTEM UTILITIES III, 1 hour credit

Continuation of CS 1501. Lecture 1 hour. Corequisite: CS 2413. Prerequisite: CS 1501.

## 2413* DATA STRUCTURES, 3 hours credit

An introduction to elementary data structures (stacks, queues, linked lists and trees) and their applications. A brief survey of sorting techniques. Lecture 3 hours. Corequisite: CS 2401 . Prerequisites: CS 1513 and CS 1523.

## 2513 COMPUTER ORGANIZATION AND ARCHITECTURE, 3 hours credit

An introduction to the computer system, central processing unit, control unit, and parallel organization. Current architectural directions will be discussed. Lecture 3 hours. Prerequisites: CS 1513.

## 3001-3 SEMINAR IN COMPUTER SCIENCE, $1-3$ hours credit

Intermediate level current topics that are not part of a common core. Lecture 1-3 hours. Prerequisites: Announced prerequisites.

## 3013 NETWORK PROGRAMMING, 3 hours credit

Concepts of multiprocessing and interprocess communication, networking protocol architecture, construction of client/server software using low and high level system calls. Lecture 3 hours. Prerequisite: CS 2513.

## 3100 COMPUTER SCIENCE INTERNSHIP, 1-3 hours credit

This course is designed to give students practical work experience and on-the-job training in the field of Computer Science. This course is offered on a S/U basis only. A maximum of 6 credits may be taken. In addition to the satisfactory completion of the approved internship, a minimum of 50 hours work per credit hour is required. Department permission is required to enroll in this course. Before the student can enroll in the course, he or she must ask the employer to issue a "Letter of Appointment" to the Department Coordinator of Computer Science regarding their intent to hire the student. The letter shall describe the conditions under which the employer will hire the intern and the nature of the internship project. Upon approval by the Computer Science Coordinator, the student will be able to enroll in this course. Prerequisite: Departmental permission and completion of substantial course work in computer science.

## 3183 STRUCTURED QUERY LANGUAGE, 3 hours credit

An in-depth study of the Structured Query Language (SQL), and relational database processing. Topics will include general application development using basic and advanced select statements. Other topics to include queries involving multiple tables. Lecture 3 hours. Prerequisites: Announced prerequisites.

## 3343 NUMERICAL ANALYSIS I, 3 hours credit

An introductory course in numerical analysis. Topics include: Accuracy in numerical calculations; evaluation of functions; numerical integration; solution of nonlinear equations; solution of systems of nonlinear equations and interpolation. Lecture 3 hours. Prerequisites: MATH 2235 and CS 1313 or departmental permission.

## 3443 NUMERICAL ANALYSIS II, 3 hours credit

A continuation of CS 3343. Topics include: Additional topics in numerical integration; ordinary differential equations; interpolation and curve fitting. Optional topics may include partial differential equations. Lecture 3 hours. Prerequisite: CS 3343.

3513 OPERATING SYSTEMS, 3 hours credit
Overview of hardware and software, process management, storage management, processor management, and auxiliary storage management. Lecture 3 hours. Prerequisite: CS 2513.

## 3573 COMPUTER GRAPHICS, 3 hours credit

Computer representation, generation and display of images. Topics included are display of 2D and 3D images; color display; algorithms, and transformations for clipping, windowing, and perspective; survey of graphics display devices; and use of graphics packages. Lecture 3 hours. Prerequisite: CS 2413.

## 3713 ALGORITHM ANALYSIS, 3 hours credit

A mathematical analysis of common algorithms: common searches and sorting, graphs, and string matching. An introduction to the notion of complexity. Lecture 3 hours. Prerequisites: CS 2413 and MATH 2235.

## 3813 PARALLEL COMPUTING, 3 hours credit

Parallel algorithms and implementations for sorting, searching, matrix processing and other problems. Efficiency issues of parallel algorithms on different architectures. Lecture 3 hours. Prerequisite: CS 2513.

## 4001-3 SEMINAR IN COMPUTER SCIENCE, 1 - 3 hours credit

Advanced level current topics that are not part of a common core. Lecture: 1-3 hours. Prerequisites: Announced prerequisites.

## 4013 FORMAL LANGUAGE THEORY, 3 hours credit

An introduction to grammars, finite state machines, push down automata, regular languages, parsing techniques and Turing machines. Lecture 3 hours. Prerequisites: CS 1523 and CS 2413.

## 4203 SOFTWARE ENGINEERING, 3 hours credit

Acquisition of the skills necessary to control complex programming projects. Lecture 3 hours. Prerequisites: CS 2413 and senior standing.

## 4223 PROGRAMMING LANGUAGES AND COMPILERS, 3 hours credit

Coverage of the concepts and constructs of the major programming paradigms and an introduction to the theory and techniques of compiler construction. Lecture 3 hours. Prerequisite: CS 2513.

## 4443 COMPUTER USAGE FOR ELEMENTARY TEACHERS, 3 hours credit

A course specifically designed to introduce the elementary teacher to micro-computers and programming concepts using a structured programming language (BASIC). The course includes construction of and evaluation of software suitable for use in the elementary school. Does not apply toward a major or minor in Computer Science. Lecture 3 hours. Prerequisite; MATH 3353, elementary teaching experience, or departmental permission.

## 4491-3 SPECIAL PROBLEMS IN COMPUTER SCIENCE, 1 - 3 hours credit

Individual and group projects in computer science based on proposals by students which are approved and supervised by faculty members. May be repeated as often as desired with permission of the department chairman. Prerequisite: Approval by department chairman and faculty member supervising the project.

## ELECTRONIC ENGINEERING TECHNOLOGY COURSES (EET)

## 1013* ELECTRICITY I, 3 hours credit

Electrical principles and applications are introduced. Topics include electrical parameters and units, direct and alternating current, series and parallel circuits, resistance, capacitance, inductance, and magnetism. Lecture 2 hours, laboratory 2 hours. Prerequisite: Understanding of algebraic principles.

## 1023 ELECTRICITY II, 3 hours credit

A continuation of EET 1013. Topics include equivalent circuits, reactance, impedance, and power factor. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 1013 and an understanding of plane trigonometry.

## 1053 ELECTRONICS I, 3 hours credit

Semiconductor electronic device characteristics, operation, and applications are introduced. Junction diodes, zener diodes, light emitting diodes, bipolar and field effect transistors, and operational amplifiers are covered. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 1013.

## 1063 INTRODUCTION TO NETWORKING, 3 hours credit

An overview of computer networking. Topics include network topologies, network software, the clientserver model, the OSI/ISO model, network components, TCP/IP, and network security. Lecture 3 hours. Prerequisite: CIS 1013.

## 2001-3 SPECIAL PROBLEMS IN ELECTRONICS, $1-3$ hours credit

Guidance in independent work. Assigned study projects to strengthen student understanding of electronic principles and applications. Lecture arranged, laboratory arranged. Prerequisites: Sophomore standing and department permission.

## 2013 ELECTRONICS II, 3 hours credit

A study of single and multistage electronic analog circuits. Applications include amplifiers, operational amplifier applications, power supplies, oscillators, active filters, phase-locked loops, and thyristors. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 1053.

## 2023 DIGITAL COMPUTER ELECTRONICS, 3 hours credit

A study of logic circuitry including integrated circuit configurations. Course topics include number systems, simplification techniques, logic gates, combination logic, and memory. Lecture 2 hours, laboratory 2 hours, Prerequisite: EET 1053.

## 2133 MEASUREMENTS AND CONTROLS I, 3 hours credit

The study of electronic measurement and control interfaces including pressure, level, flow, temperature, and velocity. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 2013.

## 2193 CIRCUIT APPLICATIONS, 3 hours credit

A project oriented capstone course that involves applications of electronic principles included in previous 1000 and 2000 level EET courses. Lecture 2 hours, laboratory 2 hours. Prerequisite: 12 hours of EET credit or departmental permission.

## 2243 COMMUNICATIONS CIRCUITS, 3 hours credit

The study of electronic transmitting and receiving circuits. Topis include oscillators, tuned circuits, amplifiers, and filters. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 2013.

## 2263 TELECOMMUNICATION SYSTEMS, 3 hours credit

A study of electronic telecommunication systems. Topics include telephone equipment, networking, signal transmission codes, and protocols. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 1013 and EET 1053.

## 3133 MEASUREMENTS AND CONTROLS II, 3 hours credit

Principles and applications of electronic measurements and controls applied to industry. Modern industrial applications including programmable logic controllers and robotics are covered. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 2133.

## 3333 MICROPROCESSORS I, 3 hours credit

A study of microprocessors, including architecture, assembly language, programming and machine language programming. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 1053.

## 3473 OPTOELECTRONICS, 3 hours credit

A study of the interactions and interfacing of electronic and optic systems and signals. Course emphasizes optoelectronic emitters, receptors, signal transmissions, and video devices. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 2013.

## 4233 NETWORK COMMUNICATIONS APPLICATIONS, 3 hours credit

Applications of network communications systems. Topics include hardware, software, interfacing, media, and system management. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 2243 and EET 2263.

## 4343 MICROPROCESSORS II, 3 hours credit

A continuation of Microprocessors I with focused study emphasizing the application of microprocessors to industrial, communications, and consumer products. Lecture 2 hours, laboratory 2 hours. Prerequisite: EET 3333.

## 4813 SYSTEM DESIGN AND ANALYSIS, 3 hours credit

A capstone course for EET Bachelor of Science degree seekers. Students design, construct, and demonstrate electronic systems. These systems include applications of concepts encountered in EET and TECH courses leading to the BS degree. Lecture 2 hours, laboratory 2 hours. Prerequisite: 21 hours in EET or departmental permission.

## ENGINEERING DESIGN TECHNOLOGY COURSES (EDT)

## 1053* INDUSTRIAL FLUID POWER, 3 hours credit

Applied fluid mechanics involving valves, cylinders, pumps, piping standards, fluid motors, basic circuits symbols, industrial components, and commercial systems. Lecture 2 hours, laboratory 2 hours.

## 2001-3 SPECIAL PROBLEMS IN DESIGN, 1-3 hours credit

Assigned study projects will include topics not covered in detail in the computer aided drafting curriculum and will be based on student needs. Laboratory 3-9 hours. Prerequisite: Sophomore standing or departmental permission.

## 2053 MANUFACTURING PROCESSES, 3 hours credit

An investigative study of materials that we use every day and the manufacturing processes which produce these materials. The application of these materials will also be studied. The materials to be included, but not limited to, are metals, plastics, ceramics, and composites. Lecture 3 hours.

## 2103 STATICS AND STRENGTH OF MATERIALS, 3 hours credit

Principles of statics, analysis of structures, and friction as applied to the incline plane and wedge. Simple direct and compound stresses, determination of structural sizes as a function of unit stress, and physical properties of the materials. Lecture 3 hours. Prerequisite: MATH 1613 or equivalent or concurrent enrollment.

## 2173 TOOL DESIGN, 3 hours credit

A study of machine shop practices as related to work holding devices. Design of specialized machining tools using standard industrial components is emphasized. Lecture 2 hours, laboratory 2 hours. Prerequisite: CAD 1073 or equivalent.

## 3013 GIS APPLICATIONS, 3 hours credit

A course designed to teach applications of GIS in various fields such as engineering design, business, and agriculture. The course emphasizes on the need and methods to choose the correct GIS model to develop a successful GIS application. Lecture 2 hours, laboratory 2 hours. Prerequisite: CAD 2023 or CAD 2063.

## 3023 COMMERCIAL ARCHITECTURE, 3 hours credit

The design of commercial buildings with emphasis on safety, durability, and comfort. Lecture 2 hours, laboratory 2 hours. Prerequisite: CAD 1043.

## 3033 MACHINE DESIGN, 3 hours credit

The design of power transmitting machinery composed of machine elements such as gears, pulleys, and cams. Lecture 2 hours, laboratory 2 hours. Prerequisite: EDT 2103 or concurrent enrollment.

## 3053 COMPUTER AIDED PIPE DRAFTING, 3 hours credit

Computer Aided Drafting solutions applying piping terminology, symbols, flow diagrams, piping plans and elevations, line isometrics, and detail dimensioning. Lecture 2 hours, laboratory 2 hours. Prerequisites: EDT 1023.

## 3103 PROJECT MANAGEMENT, 3 hours credit

The course presents basic principles of project management, tools of project management, and the role of a project manager in the successful completion of a project. Lecture 3 hours. Prerequisite: CAD 2053.

3123 PRINTED CIRCUIT DESIGN, 3 hours credit
Computer Aided Drafting techniques used to develop printed circuit patterns. Lecture 2 hours, laboratory 2 hours. Prerequisites: CAD 1013, and EET 1013.

4001-3 ENGINEERING SYSTEMS: (TOPICS) 1 -3 hours credit
A study of current topics in technology. Areas may include but not be limited to system planning, design, development, implementation, and evaluation. Concept development will be focused on customer needs and quality programs.

## 4013 ENGINEERING DESIGN CAPSTONE, 3 hours credit

Capstone course which uses a combination of 2D and 3D drafting and mechanical design techniques to solve advanced engineering design problems. Lecture 0 hours, laboratory 6 hours. Prerequisite: Departmental permission.

## 4023 GIS DESIGN, 3 hours credit

The course covers concepts in Geodatabase design, creation of data tables and spatial relationships of features. Various aspects of information management will be studied. Lecture 2 hours, laboratory 2 hours. Prerequisite: CAD 2023 or CAD 2063.

## 4033 CAD/CAM APPLICATIONS, 3 hours credit

A course designed to teach the use of computer aided designs and drawings to create programs for computer controlled manufacturing equipment such as lathes and milling machines. Lecture 2 hours, laboratory 2 hours. Prerequisite: CAD 2073.

## 4043 STRUCTURAL DESIGN, 3 hours credit

The analysis, design and detailing of structural components and systems in accordance with industry standards. Problems are solved analytically and graphically using computer based CAD systems. Lecture 2 hours, laboratory 2 hours. Prerequisites: CAD 1073 and EDT 2103.

## INFORMATION ASSURANCE/SECURITY COURSES (IAS)

## 2013* HISTORY OF INFORMATION ASSURANCE/SECURITY, 3 hours credit

The historical impact of viruses, Trojans, worms and other information security threats as well as anti-virus efforts will be examined. Students will exhibit a mastery of communication skills by writing several
significant research papers and several significant oral presentations concerning the history of information assurance/security. Students will learn effective uses of technology for communicating. This is a communications intensive course. Lecture 3 hours. Prerequisite: CIS 1013 and ENG 1113.

## 2233* INTRODUCTION TO INFORMATION ASSURANCE/SECURITY, 3 hours credit

Best practices, basic policies and procedures, ethics, and fundamental legal issues will be explored. Risk Management and Disaster Recovery as applied to Information Assurance/Security will be investigated. Ethics and vulnerability issues will also be covered. Lecture 3 hours. Prerequisite: IT 2063.

## 3063 INFORMATION ASSURANCE NETWORKING FUNDAMENTALS, 3 hours credit

Students will analyze and design a secure network. Intrusion Detection, fundamental forensics, incident handling and privacy issues will be examined. Lecture 3 hours. Prerequisite: IAS 2233.

## 3233* INFORMATION ASSURANCE/SECURITY, 3 hours credit

Best practices, basic policies and procedures, ethics, and fundamental legal issues will be explored. Risk Assessment and Disaster Recovery as applied to Information Assurance/Security will be investigated. Ethics and vulnerability issues will also be covered. Lecture 3 hours. Prerequisite: IAS 2233.

## 3263 SECURITY ARCHITECTURE AND DESIGN, 3 hours credit

Students will configure a secure network and an intrusion detection system. Network monitoring plans and bandwidth management plans will be created. Policies and procedures will be created. A basic forensics data report will be designed. Lecture 3 hours. Prerequisite: IAS 3063.

## 4063* CURRENT TOPICS IN INFORMATION ASSURANCE AND NETWORK SECURITY, 3 hours credit

Students will research current literature and compare and summarize current Information Assurance Issues, legal issues, and events. A Disaster Recovery Plan and a Risk Assessment Plan will be created. Audit Plans will be created. Acceptable Use Policies will be assessed. Policies and procedures will be assessed. Lecture 3 hours. Prerequisite: IAS 3063.

## INFORMATION TECHNOLOGY COURSES (IT)

## 1213* PROGRAMMING LOGIC, 3 hours credit

A basic introduction to the knowledge and skills that are used in computer programming. Topis include: the third generation programming environment, program design and pseudocode, coding, debugging, basic control structures, basic classes and objects, and methods. Lecture 3 hours. Prerequisite: CIS 1013.

## 1413* PROGRAMMING I, 3 hours credit

The first course in computer programming using an Object Oriented approach. Topics include: the third generation programming environment, program design and pseudocode, coding, debugging, basic control structures including conditional statements, loops, methods, basic classes and objects. Other topics include array processing and basic GUI issues. Lecture 3 hours. Prerequisite: IT 1213, MATH 1513 or permission of department.

## 2063 NETWORK OPERATING SYSTEMS, 3 hours credit

The installation, configuration, and administration of operating systems in a network of computers (LAN). Current and relevant software will be studied to include both server software and client software. Lecture 3 hours. Prerequisites: EET 1063.

## 2413* PROGRAMMING II, 3 hours credit

The second course in computer programming using an Object Oriented approach. Topics include: programming in the GUI environment, Classes, Objects, fast sorts, Abstract Data Types, Strings, recursion, and file processing. Lecture 3 hours. Prerequisite: IT 1413.

## 3603 HUMAN COMPUTER INTERFACE DEVELOPMENT, 3 hours credit

An exploration of Graphical User Interface development and human computer interaction using a current RAD tool. Issues of good and bad design of both Web and Application GUls. Lecture 3 hours. Prerequisite: IT 2413.

## 4342* LEGAL AND ETHICAL ISSUES FOR THE IT PROFESSIONAL, 2 hours credit

The course is designed to give students an ability to distinguish and analyze information systems legal, social and ethical issues. Through class lecture, case study analysis, class discussion, final project preparation, and outside readings, students will become versed in the logical/critical thinking skills required to make ethical decisions as an information technology professional. Lecture 2 hours. Prerequisite: senior standing.

## 4444 IT CAPSTONE, 4 hours credit

A comprehensive survey of current topics in the area of Information Technology and an integration of outcomes from earlier courses. The class will be a seminar where students will work in teams to research current issues and emerging technologies. Lecture 4 hours. Prerequisites: senior level and advisor permission.

## MANAGEMENT INFORMATION SYSTEMS COURSES (MIS)

## 2013 PROGRAMMING I, 3 hours credit

Introduction to and use of application development tools for object-oriented programming. Emphasizes stepwise refinement of fourth generation computer languages ( 4 GLs ) and introduces CASE (Computer-AidedSoftware Engineering) tools during the developmental process. Student designs elementary business solutions using general application development software, report generation, macro, query, and other application features. Lecture 3 hours. Prerequisite: CIS 1063 or department permission.

## 2113 FUNDAMENTAL MIS TOOLS AND SKILLS, 3 hours credit

A study of Management Information Systems essential skills and tools from a business analyst's perspective. Extensive focus on written and oral communication skills through required projects and presentations. Tools covered include project management software, CASE software and database software. Lecture 3 hours. Prerequisite: CIS 1013.

## 3013 MANAGEMENT INFORMATION SYSTEMS, 3 hours credit

An overview of the current principles and practices of information systems and solving problems from a managerial perspective. Lecture 3 hours. Prerequisites: CIS 1013 or computer proficiency. Must have Junior standing or permission of Chair.

## 3021-3 BUSINESS SOFTWARE APPLICATIONS, $1-3$ hours credit

A study of selected software for microcomputer systems. Course may be repeated for credit with different software packages. Lecture 1-3 hours. Prerequisite: CIS 1013 or computer literacy.

## 3033 APPLIED DATA MODELING, 3 hours credit

Theory and concepts of database design and management. Focuses primarily on relational database modeling. Topics include Entity Relationship Diagrams; Enterprise, Conceptual, Logical, and Physical models; normalization; usage maps; implementation; and a brief exposure of SQL for data manipulation, update, and retrieval. Students will design and implement a relational database for a business application using a CASE program. Lecture 3 hours. Prerequisite: CIS 3083 or MIS 3013.

## 3083 SYSTEMS ANALYSIS AND DESIGN, 3 hours credit

Systems development using modern methods and tools. Recent advances in software technologies such as distributed hypermedia systems (World Wide Web), CASE tools, GUI tools, DBMSs, 4GLs, and the Systems Development Life Cycle (SDLC). Study of object-oriented development and Web-based information systems development issues. Students write a business application program. Lecture 3 hours. Prerequisite: MIS 3033.

## 3123 ADVANCED BUSINESS APPLICATIONS OF MICROCOMPUTER SOFTWARE, 3 hours credit

Study of advanced features of major microcomputer application software packages, including word processing, spreadsheet, graphics, and database software. Emphasis on hands-on use of these packages to develop software applications for solving complex business problems. Lecture 3 hours. Prerequisite: MIS 2113.

## 3223 BUSINESS DATA COMMUNICATION/TELECOMMUNICATIONS, 3 hours credit

Introduction to data communications and networking in a business environment while emphasizing current advances in telecommunications technology, regulation, and international standards. Topics include TCP/IP and the OSI model; current data communications protocols; network architecture including client/server networks; and operating systems. Student becomes conversant in data communication terminology and concepts. Knowledge and skills gained will be applied in an end-of-course business scenario. Lecture 3 hours. Prerequisite: MIS 3013.

## 4033 ELECTRONIC COMMERCE, 3 hours credit

This course will involve a comprehensive look at electronic commerce. Students will gain theoretical exposure to the complex field as well as practical experience in basic web programming. Course topics include: business models, revenue models, e-commerce security, payment systems, as well as legal, social and ethical issues. Lecture 3 hours. Prerequisite: MIS 2113.

## 4471-3 SEMINAR IN MANAGEMENT INFORMATION SYSTEMS, 1 - 3 hours credit

Study of specified topics in Management Information Systems such as advanced telecommunications, advanced data base, data warehousing, information security, web page design, decision support systems, and other topics. Can be repeated for maximum of nine (9) hours credit under different topic titles. Prerequisite: Permission of the Chair.

4491-3 INDEPENDENT STUDY IN MANAGEMENT INFORMATION SYSTEMS, 1 -3 hours credit Independent reading and/or study of specific problems or special subjects, based upon pre-approved outlines of plans, with conferences and/or written reports. Prerequisites: Nine upper division hours in the discipline of the independent study and permission of the Chair. A proposal must accompany the request when submitted for approval.

## 4533 APPLIED PROBLEMS IN MANAGEMENT INFORMATION SYSTEMS, 3 hours credit

A capstone course designed to integrate course work in various functional areas of MIS applications. Emphasizes teamwork, analytical and critical thinking, technical and managerial skills in the creation and management of an information systems application. Lecture 3 hours. Prerequisites: MIS 3083.

## TECHNOLOGY COURSES (TECH)

## 2033 QUALITY CONTROL, 3 hours credit

Introduction to quality concepts in manufacturing technology, including discussion of current business/industry standards. Lecture 3 hours. Prerequisite: MATH 1513 or equivalent.

## 3000-3 TECHNOLOGY WORKSHOP, $0-3$ hours credit

Designed to give intensive emphasis to a specific area of technology. May be repeated with a change of content for a maximum of 6 hours credit. Prerequisite: Junior standing and/or departmental permission.

## 3013* TECHNICAL COMMUNICATIONS, 3 hours credit

Principles of organizing information into clear and concise audience centered technical reports and presentations. Writing as a process, collaboration, and presentations are emphasized. Lecture 3 hours. Prerequisite: Junior standing or departmental permission.

## 3033 PRODUCTION PLANNING, 3 hours credit

A systematic approach to the factors and influences affecting quality, time, and cost of production using automated problem solving tools and team strategies. Lecture 3 hours. Prerequisite: Junior standing or departmental permission.

## 4003-6 DIRECTED OBSERVATION AND ON-THE-JOB INTERNSHIP, 3-6 hours credit

Directed observation and on-the-job internship served in area directly related to the student's technical specialty. The job should be approved by the major advisor prior to starting the internship. Laboratory 6-12 hours. Prerequisites: TECH 3013 and 3023 or departmental permission.

## 4023 COMPUTER GENERATED PRESENTATIONS, 3 hours credit

Study of computer generated multimedia presentations using drawing and design theory to include color, perspective, 2D and 3D rendering, and animation. Lecture 3 hours. Prerequisites: CIS 1013, CAD 1013, ART 1113, or departmental permission.

## 4033 INDUSTRIAL MANAGEMENT SYSTEMS, 3 hours credit

Study of the interrelationship of machines and employees in the workplace. Topics include facilities, equipment, constraints, and personnel management systems. Lecture 3 hours. Prerequisite: Junior standing or departmental permission.

## 4143 WORKPLACE SAFETY, 3 hours credit

An in-depth study of the necessary skills for the improvement, expansion, and enrichment of employer health and safety policies to promote accident-free work experiences for American workers in various settings. Prerequisite: TECH 3033.

## 4153 COMPUTER SECURITY, 3 hours credit

The objective of this course is to investigate a broad selection of up to date issues in computer security and what modern technology is used to deal with security problems. Specific subject matters to be covered in the course are: sources of security threats and suitable reactions, cryptographic techniques, access control mechanisms, information models, authentication mechanisms, firewalls, computer viruses, and legal and ethical issues. Students will study and analyze real world case studies in computer security. Prerequisite: Fifteen (15) semester hours in CIS and/or CS, one Telecommunications course and permission.

## 4491-3 INDEPENDENT STUDY IN TECHNOLOGY, $1-3$ hours credit

Assigned research, reading, and reports based on the needs of the individual student and directly related to the student's technical specialty. Individual guidance will be provided by a faculty member. Prerequisite: Junior standing or departmental permission. The total number of hours earned in Independent Study may not exceed four.

## VOCATIONAL COURSES (VOC)

## 1001-3 SPECIAL PROBLEMS, $1-3$ hours credit

An assigned study project which will include advanced training in a particular vocational area. 24 shop hours per credit hour enrolled. Prerequisite: Permission of Technology Department Chairman.

## 1012 VOCATIONAL SHOP, 2 hours credit

The use and care of common hand tools, instruments and measuring devices, shop safety, and career guidance. 48 shop hours. Prerequisite: none.

## 1014 AUTO BODY REPAIR, 4 hours credit

Selected topics such as sheet metal repair, painting, and refinishing, frame straightening, and auto glass accessories. Shop experience using military and/or commercial vehicles. May be repeated with a different topic for a total of 8 credit hours. 96 shop hours per course. Prerequisite: VOC 1012.

2004 AUTOMOTIVE MAINTENANCE, 4 hours credit
Selected topics such as gasoline engines, chassis, fuel systems, and tune-up. Shop experience using military and/or commercial vehicles. May be repeated with a different topic for a total of 16 credit hours. 96 shop hours per course. Prerequisite: VOC 1012.

## 2014 DIESEL MAINTENANCE, 4 hours credit

Selected topics such as diesel engines, chassis, fuel systems, power trains, electrical systems, and tune-up. Shop experience using military and/or commercial vehicles. May be repeated with a different topic for a total of 16 credit hours. 96 shop hours per course. Prerequisite: VOC 1012.

2024 WELDING, 4 hours credit
Selected topics such as acetylene, arc, M.I.G. and T.I.G. welding. Shop experience using military and/or commercial equipment. May be repeated with a different topic for a total of 16 credit hours. 96 shop hours per course. Prerequisite: VOC 1012.

## 2034 AIR CONDITIONING, REFRIGERATION AND HEATING, 4 hours credit

Selected topics such as refrigeration, heating, and air-conditioning. Shop experience using military and/or commercial equipment. May be repeated with a different topic for a total of 16 credit hours. 96 shop hours per course. Prerequisite: VOC 1012.

[^10]
## DEPARTMENT OF

Mathematical sciences

CHAIR - Karla Oty, Professor
Professors: Argyros, Jankovic, McArthur, Tabatabai
Assistant Professors: B. Davis
Instructors: Christensen, Maxson, Meyers, Washington
The Department of Mathematical Sciences offers programs in mathematics, one of the oldest academic disciplines, as well as in statistics. The Department offers programs leading to a Bachelor of Arts degree with a major in Mathematics and a Bachelor of Arts degree with a major in Mathematics Education. Minors are also offered in mathematics and statistics.

Mathematics and statistics are fundamental to a wide variety of fields and careers. Students who major or minor in mathematics have problem solving and logic skills that are highly desired by employers in industry and government. Statistics is instrumental in the study of the behavioral and social sciences, the biological and physical sciences, and business. The Bachelor of Arts degree with a major in Mathematics Education will prepare students for a career in teaching secondary mathematics.

## BACHELOR OF ARTS DEGREE MAJOR IN MATHEMATICS (150)

I. GENERAL EDUCATION REQUIREMENT 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... Minimum of 35 hours
Required Courses ..... 29 hours
MATH 2215, MATH 2235, MATH 2244, MATH 2613 , MATH 3013 , MATH 3213, MATH 3253, MATH 4483
6 hoursElectivesElectives must be chosen from the following mathematics, statisticsand computer science courses.
MathematicsMATH 3302, MATH 3333, MATH 4113, MATH 4423, MATH 4433,MATH 4471-3, MATH 4491-3
Statistics
STAT 3023, STAT 3113, STAT 3123, STAT 3202
Computer ScienceCS 3343, CS 3443
III. ADDITIONAL REQUIREMENTS ..... 4 hours
A student majoring in mathematics must complete the following: CS 1301 and CS 1313IV. MINOR
(A minor in mathematics may include the courses listed under additional requirements of the major in Computer Science.)

## v. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.

## BACHELOR OF ARTS DEGREE MAJOR IN MATHEMATICS EDUCATION (155)


II. MAJOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Minimum of 41 hours

Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 13 hours
Electives must be chosen from the following mathematics and computer science courses.

Mathematics
MATH 3213, MATH 3253, MATH 4113, MATH 4471-3,
MATH 4491-3, MATH 4483

## Computer Science

CS 1301, CS 1313, CS 1523, CS 3343
Required Education Courses ...................................................... . . . 33 hours
EDUC 1800, EDUC 3003, SPED 3103, EDUC 3612**, EDUC 3673, EDUC 3733, EDUC 3753*, EDUC 4313*, EDUC 4653*, EDUC 4965**
EDUC 4975**
(*Restricted to those students who have been admitted to Teacher
Education. See Page 52 in this catalog or the undergraduate education
advisor for admission requirements.
**Courses taken during professional semester

## III. ADDITIONAL REQUIREMENTS

Mathematics Education candidates must achieve a grade of C or better in all major courses (required core courses and required education courses) in order to receive credit toward a degree. If a grade of $D, F$, or $U$ is achieved, the course must be repeated.

Mathematics Education candidates must demonstrate foreign language proficiency (listening and speaking) at the novice-high level as defined by the American Council on the Teaching of Foreign Languages by passing a Department of English and Foreign Languages proficiency test or by taking a foreign language course.

## Teacher Licensure/Certification

The student who completes the requirements for this degree and passes the state tests for certification in Mathematics will be eligible to apply for a standard teaching license.

## MATHEMATICS COURSES (MATH)

"Students who have credit in mathematics courses numbered 2000 or above may not enroll in courses below 2000 without departmental approval."

## 0013 PRE-ALGEBRA, 3 hours credit (RemedialDevelopmental Course)

This course provides a solid foundation in whole and signed number operations, fractions, decimals, percent, ratio, proportion and elementary geometry. Does not satisfy any requirements for any degree program at Cameron University. Lecture 3 hours.

## 0103 BEGINNING ALGEBRA, 3 hours credit (RemedialDevelopmental Course)

This course is an introduction to algebra. Topics covered include introduction to the real number system, solving and graphing linear equations and inequalities, arithmetic operations using polynomials, factoring, and simplifying rational expressions. Does not satisfy any requirements for any degree program at Cameron University. Prerequisite: MATH 0013 or satisfactory placement score. Lecture 3 hours.

## 0115 BEGINNING AND INTERMEDIATE ALGEBRA, 5 hours credit (Remedial Developmental Course)

A combined beginning and intermediate algebra course. This course is designed for students who are able to cover the material in both beginning and intermediate algebra in one semester. Does not satisfy any requirements for any degree program at Cameron University. Prerequisite: MATH 0013 or satisfactory placement score. Lecture 5 hours.

## 0213 INTERMEDIATE ALGEBRA, 3 hours credit (Remedial/Developmental Course)

This course is designed to help students develop the skills needed for general education courses. Topics include radical and rational exponents, inequalities, quadratics, complex numbers, and an introduction to functions. Does not satisfy any requirements for any degree program at Cameron University. Prerequisite: MATH 0103 or satisfactory placement score. Lecture 3 hours.

## 1513* COLLEGE ALGEBRA, 3 hours credit

Topics covered are functions and graphs, including polynomial, rational, exponential and logarithmic; conic sections; linear systems; and matrices. College Algebra requires the use of a graphing calculator. Does not apply toward a maior in mathematics. Lecture 3 hours. Prerequisite: MATH 0213 or MATH 0115 or equivalent.

## 1613* PLANE TRIGONOMETRY, 3 hours credit

The development and use of circular and trigonometric functions; relations between the functions, logarithms, solutions of triangles; applications to practical problems throughout the course. Does not apply towards a major in mathematics. Lecture 3 hours. Prerequisite: MATH 1513 or equivalent or concurrent enrollment in MATH 1513.

## 1715* COLLEGE ALGEBRA AND TRIGONOMETRY, 5 hours credit

An integrated course in College Algebra and Trigonometry. This course is equivalent to the two courses MATH 1513 and MATH 1613. Does not apply towards a major in mathematics. Lecture 5 hours. Prerequisite: MATH 0115 or 0213 or equivalent.

## 1813* SURVEY OF MATHEMATICS, 3 hours credit

A survey course in Mathematics designed to acquaint the student with the breadth and beauty of mathematics. Topics to be selected from set theory, logic, functions and relations, abstract algebraic systems, history of numeration systems, combinatorial analysis and probability, statistics, geometry and topology. Does not apply toward a major or minor in mathematics. Lecture: 3 hours. Prerequisite: MATH 0213 or MATH 0115 or equivalent.

## 2215* CALCULUS AND ANALYTIC GEOMETRY I, 5 hours credit

Limits, derivatives with applications, the definite integral with applications. Lecture 5 hours. Prerequisites: MATH 1513 and 1613 or MATH 1715 or equivalent.

2235* CALCULUS AND ANALYTIC GEOMETRY II, 5 hours credit
Techniques of integration, applications of integration, polar coordinates, sequences and series, vectors. Lecture 5 hours. Prerequisite: MATH 2215.

## 2244* CALCULUS AND ANALYTIC GEOMETRY III, 4 hours credit

Solid analytic geometry, partial differentiation, multiple integrals, functions of several variables, vector calculus. Lecture 4 hours. Prerequisite: MATH 2235.

## 2491-3 SELECTED TOPICS IN MATHEMATICS, 1 - 3 hours credit

A course designed to give non-mathematics majors the opportunity to study topics which are either not covered in the regular mathematics course offerings or not covered in sufficient depth for their needs. Topics considered appropriate for this course are those which require little or no calculus. May be repeated as often as desired with permission of the department chairman. Prerequisite: Permission of the department.

## 2613* FOUNDATIONS OF MATHEMATICS, 3 hours credit

This course is designed to facilitate the transition from calculus to advanced mathematics. Topics include logic, sets, relations, functions, properties of real numbers, cardinality, combinatorics and probability. Lecture 3 hours. Prerequisite: MATH 2215.

## 2713* ELEMENTARY CALCULUS, 3 hours credit

An introductory course in calculus for the non-mathematics major covering the following topics: limits, derivatives, and integration of functions of one or more variables. Applications will be related to Business, Economics, and the Social Sciences. Does not apply towards a major in mathematics. Lecture 3 hours. Prerequisite: Math 1513 or equivalent.

## 3013 INTRODUCTORY LINEAR ALGEBRA, 3 hours credit

An introduction to the basic topics of linear algebra to include linear systems, matrices, vectors, and vector spaces, eigenvalues, and linear transformations. Lecture 3 hours. Prerequisite: MATH 2613.

## 3213* ABSTRACT ALGEBRA, 3 hours credit

The course emphasizes algebraic structures with particular emphasis on groups, rings, and fields. The fundamental theorems of group and ring theory are introduced and the beginning notions of field theory are presented. Prerequisite: MATH 2613.

## 3253 DIFFERENTIAL EQUATIONS, 3 hours credit

Ordinary differential equations with a brief introduction to solutions by series and Laplace transforms. Lecture 3 hours. Prerequisite: MATH 2235.

## 3302* HISTORY OF MATHEMATICS, 2 hours credit

The historical development of mathematics. Lecture 2 hours. Prerequisite: Departmental permission.
3333* COLLEGE GEOMETRY, 3 hours credit
A comprehensive course which includes topics from both Euclidean and non-Euclidean geometries. Lecture 3 hours. Prerequisite: MATH 2215.

## 3353 MATHEMATICS FOR ELEMENTARY TEACHERS I, 3 hours credit

A basic course in (contemporary or modern) mathematics for elementary education majors. An introduction to problem solving and number theory as they relate to numeration systems, rational numbers, elementary algebra, functions, and the use of current technologies. Does not apply toward a major or minor in mathematics. Lecture 3 hours. Prerequisite: Completion of General Education Requirement.

## 3363 MATHEMATICS FOR ELEMENTARY TEACHERS II, 3 hours credit

Structure of the real number system, functions, statistics, probability, and elementary geometric concepts with emphasis on informal geometry. Additionally, use of technology as a teaching tool is introduced. Does not apply toward a major or minor in mathematics. Lecture 3 hours. Prerequisite: MATH 3353 or departmental permission.

## 3373 ALGEBRA FOR ELEMENTARY TEACHERS, 3 hours credit

A course in algebra specifically designed for the elementary teacher which includes those topics of algebra that permeate the modern elementary program and many of those which elementary students will encounter in the secondary school. Does not apply towards a major or minor in mathematics. Lecture 3 hours. Prerequisite: MATH 3363 or departmental permission.

## 3383 GEOMETRY FOR ELEMENTARY TEACHERS, 3 hours credit

A course in geometry specifically designed for the elementary teacher. The geometrical concepts which are introduced in modern elementary mathematics programs are covered in detail in this course. Does not apply towards a major or minor in mathematics. Lecture 3 hours. Prerequisite: MATH 3363 or departmental permission.

## 4113 INTRODUCTION TO OPERATIONS RESEARCH, 3 hours credit

An introductory treatment of some of the problems and techniques encountered in operations research. Topics include: linear programming, network analysis, game theory, Markov chains, analytical hierarchies. Lecture 3 hours. Prerequisite: MATH 2215 or 2713 or departmental permission.

## 4423* NUMBER THEORY, 3 hours credit

Divisibility of integers, congruences, quadratic residues, mathematical induction, distribution of primes, diophantine equations, numerical functions and continued fractions. Lecture 3 hours. Prerequisite: MATH 2613 or departmental permission.

## 4433 MATRIX ALGEBRA, 3 hours credit

Elementary operations with matrix algebra, determinants, inverse of a matrix, rank and equivalence, linear dependence, vector spaces and linear transformations, characteristic equations of a matrix; bilinear, quadratic and Hermitian forms. Lecture 3 hours. Prerequisite: MATH 2215 or departmental permission.

## 4471-3 SEMINAR IN MATHEMATICS, $1-3$ hours credit

Group projects designed to meet special needs. May be repeated as often as desired with permission of the department chairman. Prerequisite: Departmental approval. Will count on major or minor only with departmental permission.

## 4772 TEACHING OF SECONDARY MATHEMATICS, 2 hours credit

The general aspects of the teaching of mathematics; detailed study of the teaching of the various high school mathematics courses. Does not apply towards a major or minor in mathematics. Lecture 2 hours. Teacher Certification students must be admitted to teacher education prior to enrollment in this course. Prerequisite: Senior standing.

## 4483 INTRODUCTION TO REAL ANALYSIS, 3 hours credit

A study of the basic concepts of analysis, elementary set theory, the real numbers, sequences, real functions, derivatives, and integrals. Lecture 3 hours. Prerequisite: MATH 2244 and 2613.

## 4491-3 INDEPENDENT STUDY IN MATHEMATICS, $1-3$ hours credit

Assigned research, readings, and reports based on the needs of the individual student. May be taken only by juniors and seniors. May be repeated as often as desired with permission of the department chairman. Prerequisite: Departmental permission.

## STATISTICS COURSES (STAT)

## 3003* INTRODUCTION TO STATISTICS, 3 hours credit

Designed to introduce the non-mathematics student to the techniques of experimental statistics including estimation and hypothesis testing. Does not apply toward a major or minor in mathematics. Lecture 3 hours. Prerequisite: MATH 0213 or 0115 or equivalent.

## 3013* INTRODUCTORY PROBABILITY AND STATISTICS I, 3 hours credit

Descriptive statistics including graphical representation of data, elementary probability and combinatorial methods, binomial and normal distributions, statistical inference including point estimates of mean, variance and proportion, confidence intervals, test of hypotheses. Lecture 3 hours. Prerequisite: MATH 1513 or MATH 1813, or equivalent.

## 3023 INTRODUCTORY PROBABILITY AND STATISTICS II, 3 hours credit

A continuation of STAT 3013. Emphasis on various experimental designs--chi square tests, analysis of variance, regression and correlation, sampling, and introduction to nonparametric statistics. Lecture 3 hours. Prerequisite: STAT 3013 or departmental permission. The department recommends concurrent enrollment in STAT 3202.

## 3113 MATHEMATICAL STATISTICS I, 3 hours credit

Introduction to combinatorial methods, probability random variables and expected value, discrete distributions, continuous probability functions, and moment generating functions. Lecture 3 hours. Prerequisite: MATH 2235.

## 3123 MATHEMATICAL STATISTICS II, 3 hours credit

A continuation of STAT 3113. Sampling, interval estimation, tests of hypotheses, and regression and correlation. Lecture 3 hours. Prerequisite: STAT 3113.

## 3202 STATISTICAL APPLICATIONS OF THE COMPUTER, 2 hours credit

Techniques for using the computer as a tool in the analysis of statistical problems. Emphasis on data handling in statistical applications. No prior programming knowledge necessary for enrolling in this course. Lecture 1 hour, laboratory 2 hours. Prerequisite: STAT 3023 or concurrent enrollment or departmental permission.

[^11]
## DEPARTMENT OF

## Military science

CHAIR - LTC William G. Pitts, Professor<br>Senior Military Instructor: MSG Harrill Military Instructors: SFC Crage, CPT Ward Human Resource Assistant: Mrs. Gorman Supply Technician: MS Morgan

Reserve Officers' Training Corps (ROTC) is a four year program designed to complement the student's major and minor fields of study by developing the skills required in a leader. There is no military obligation for non-ROTC scholarship students enrolled in freshman and sophomore level classes. Contracted cadets receive a subsistence allowance each month during the academic year. Students completing the Advanced Course apply for a commission as a second lieutenant in the Active Army, Army Reserve or Army National Guard. Students may apply for 4 year Army scholarships during their senior year in high school, or 3 and 2 year scholarships after they enroll in the University. Qualified students may apply for Airborne, Air Assault, and other military training conducted during the summer.

## BASIC COURSE

## MS I (Freshman Year)

MSL 1011 Foundations of Officership Lab ..... 1 hour
MSL 1012 Foundations of Officership ..... 2 hours
MSL 1021 Basic Leadership Lab ..... 1 hour
MSL 1022 Basic Leadership ..... 2 hours
MS II (Sophomore Year)

| MSL 2011 Individual Leadership Lab |  |
| :---: | :---: |
| MSL 2012 Individual Leadership Studies . | 2 hours |
| MSL 2021 Leadership and Teamwork Lab |  |
| MSL 2022 Leadership and Teamwork | urs |
| MSL 2002-8 Leader's Training Cour |  |

Students may receive Advanced Standing or placement credit for the Basic Course for prior active or reserve component duty in any service. Students may also receive partial placement credit if they completed 2 or more years of Junior ROTC (JROTC) in high school. The Professor of Military Science determines the credits given for JROTC experience.

Students with sophomore academic status may take MS I and MS II courses simultaneously. Students who have completed their sophomore year and seniors applying to graduate school may attend the Leader's Training Course (MSL 2002-8) if they are interested in qualifying for the Advanced Course.

## ADVANCED COURSE

## MS III (Junior Year)

MSL 3011 Leadership and Problem Solving Lab ..... 1 hour
MSL 3021 Leadership and Ethics Lab ..... hours
MSL 3023 Leadership and Ethics ..... 3 hours
MS IV (Senior Year)
MSL 4004 Leader Development and Assessment Course (LDAC) (Summer Semester Only) ..... 4 hours
MSL 4011 Leadership Challenges/Goal Setting Lab ..... 1 hour
MSL 4013 Leadership Challenges and Goal Setting ..... 1 hour
MSL 4023 Officership ..... 3 hours

Completion of the Basic Course, Leader's Training Course or placement credit for the Basic Course and approval from the Professor of Military Science are prerequisites for the Advanced Course. Candidates for a commission must also complete classes in U.S. Military History, Communication Skills, and Computer Literacy in addition to the University's General Education requirement.

## Scholarships

Scholarships are available for two, three and four year periods. Refer to the Financial Assistance section of the catalog or contact the Military Science Department for more information.

## MILITARY SCIENCE AND LEADERSHIP COURSES (MSL)

## Basic Course

The ROTC Basic Course provides an introduction to the purpose and history of the United States Army, training in fundamental military skills, principles of instructional techniques, classroom and practical training in leadership. Enrollment in Basic Course classes is open to all full-time students, male and female, regardless of intentions to continue in ROTC or to pursue a commission. There is no military obligation incurred for Basic Course attendance by non-ROTC scholarship students. Full academic credit is given for all ROTC basic courses. Each enrollment and satisfactory completion in MSL 1012, 1022, 2012, and 2022 will satisfy 1 hour of Physical Education Activity for General Education requirements. To qualify for enrolment in the Advanced Course, a student must complete 8 hours of Basic Courses credits, through any of the following combinations: Completion of all 1000 and 2000 level courses, placement credit received from the Professor of Military Science for prior military service or JROTC leadership experience, or completion of MSL 2002-8, Leader's Training Course. Students receive a subsistence allowance while attending the Leader's Training course (MSL 2002-8).

## 1011 FOUNDATIONS OF OFFICERSHIP LAB, 1 hour credit

Leadership laboratory is a weekly period emphasizing practical application of leadership and military skills. Activities include: rifle marksmanship, map reading and land navigation, team building exercises, physical conditioning and small unit tactics. The availability of an outdoor training area on campus, and the proximity of Fort Sill, allow students to get out of the classroom and apply the skills they have learned in fast paced exercises. Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets. Prerequisite: Foundations of Officership MSL 1012 or concurrent enrollment. MSL 1012 must be successfully completed before credit is given in this course.

## 1012 FOUNDATION OF OFFICERSHIP, 2 hours credit

Introduces students to issues and competencies that are central to a commissioned officer's responsibilities. Establish framework for understanding officership, leadership and Army values followed and "life skills" such as physical fitness and time management. Lecture 2 hours, laboratory 3 hours*.
*Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets.

## 1021 BASIC LEADERSHIP LAB, 1 hour credit

Leadership laboratory is a weekly period emphasizing practical application of leadership and military skills. Activities include: rifle marksmanship, map reading and land navigation, team building exercises, physical conditioning and small unit tactics. The availability of an outdoor training area on campus, and the proximity of Fort Sill, allow students to get out of the classroom and apply the skills they have learned in fast paced exercises. Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets. Prerequisite: Basic Leadership MSL 1022 or concurrent enrollment. MSL 1022 must be successfully completed before credit is given in this course.

## 1022 BASIC LEADERSHIP, 2 hours credit

Establishes foundation of basic leadership fundamentals such as problem solving, communications, briefings and effective writing, goal setting, techniques for improving listening and speaking skills and an introduction to counseling. Lecture 2 hours, laboratory 3 hours*.
*Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets.

## 2011 INDIVIDUAL LEADERSHIP LAB, 1 hour credit

Leadership laboratory is a weekly period emphasizing practical application of leadership and military skills. Activities include: rifle marksmanship, map reading and land navigation, team building exercises, physical conditioning and small unit tactics. The availability of an outdoor training area on campus, and the proximity of Fort Sill, allow students to get out of the classroom and apply the skills they have learned in fast paced exercises. Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets. Prerequisite: Individual Leadership Studies, MSL 2012 or concurrent enrollment. MSL 2012 must be successfully completed before credit is given in this course.

## 2012 INDIVIDUAL LEADERSHIP STUDIES, 2 hours credit

Students identify successful leadership characteristics through observation of others and self through experimental learning exercises. Students record observed traits (good and bad) in a dimensional leadership journal and discuss observations in small group settings. Lecture 2 hours, laboratory 3 hours*.
*Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets.

## 2021 LEADERSHIP AND TEAMWORK LAB, 1 hour credit

Leadership laboratory is a weekly period emphasizing practical application of leadership and military skills. Activities include: rifle marksmanship, map reading and land navigation, team building exercises, physical conditioning and small unit tactics. The availability of an outdoor training area on campus, and the proximity of Fort Sill, allow students to get out of the classroom and apply the skills they have learned in fast paced exercises. Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets. Prerequisite: Leadership and Teamwork, MSL 2022 or concurrent enrollment. MSL 2022 must be successfully completed before credit is given in this course.

## 2022 LEADERSHIP AND TEAMWORK, 2 hours credit

Study examines how to build successful teams, various methods for influencing action, effective communication in setting and achieving goals, the importance of timing the decision, creativity in the problem solving process and obtaining team buy-in through immediate feedback. Lecture 2 hours, laboratory 3 hours*. *Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets.

2032 INDEPENDENT STUDY IN MILITARY SCIENCE, 2 hours credit
This course is available only to students with scheduling conflicts which prevent their completion of another lower division Military Science course. Content will duplicate the content of the course it replaces. Lecture 2 hours. Laboratory required if student is a contracted cadet.

## 2002-8 LEADER'S TRAINING COURSE (BASIC CAMP), 2-8 hours credit

A four week opportunity to develop new skills, to grow personally and to qualify for enrollment in Army ROTC advanced courses. The Leader's Training Course is a world-class leadership development program that will instill self-confidence and provide leadership skills for life. Prerequisite: Permission of the Professor of Military Science.

## Advanced Course

The Advanced Course, consists of MSL 3013,3023,4004, 4013 and 4023. Cadets normally attend Leader Development and Assessment Course (LDAC) (MSL 4004) during the summer between their junior and senior years. It is open only to students who have completed the Basic Course, Leader's Training Course or for whom the Professor of Military Science has approved placement credit based on prior military service. The Advanced Course is designed to qualify a student for a commission as an officer in the United States Army. Students must qualify physically, mentally and morally prior to enrollment. They must complete all courses in sequence unless otherwise approved by the Professor of Military Science. Students receive full academic credit, to include 4 credits for the Leader Development and Assessment Course, and may declare a minor in Military Science (as approved by the Professor of Military Science). Students receive a stipend during the school year and veterans may draw the ROTC stipend and VA educational benefits concurrently. The Advanced Course emphasizes practical exercises in leadership.

## 3011 LEADERSHIP AND PROBLEM SOLVING LAB, 1 hour credit

Leadership laboratory is a weekly period emphasizing practical application of leadership and military skills. Activities include: rifle marksmanship, map reading and land navigation, team building exercises, physical conditioning and small unit tactics. The availability of an outdoor training area on campus, and the proximity of Fort Sill, allow students to get out of the classroom and apply the skills they have learned in fast paced exercises. Attendance is mandatory for Juniors and Seniors. Prerequisite: Leadership and Problem Solving MSL 3013 or concurrent enrollment. MSL 3013 must be successfully completed before credit is given in this course.

## 3013 LEADERSHIP AND PROBLEM SOLVING, 3 hours credit

Students conduct self-assessment of leadership style, develop personal fitness regimen, and learn to plan and conduct individual/small unit tactical training while testing reasoning and problem-solving techniques, Students receive direct feedback on leadership abilities. Participation in Physical Fitness training, Leadership Lab, and one weekend Field Training Exercise is required. Lecture 3 hours, Leadership Laboratory 3 hours. Prerequisite: Completion of Military Science Basic Courses or placement credit for the Basic Courses and permission of the Professor of Military Science.

## 3021 LEADERSHIP AND ETHICS LAB, 1 hour credit

Leadership laboratory is a weekly period emphasizing practical application of leadership and military skills. Activities include: rifle marksmanship, map reading and land navigation, team building exercises, physical conditioning and small unit tactics. The availability of an outdoor training area on campus, and the proximity of Fort Sill, allow students to get out of the classroom and apply the skills they have learned in fast paced exercises. Mandatory attendance for Juniors and Seniors. Prerequisite: Leadership and Ethics MSL 3023 or concurrent enrollment. MSL 3023 must be successfully completed before credit is given in this course.

## 3023 LEADERSHIP AND ETHICS, 3 hours credit

Examines the role communications, values and ethics play in effective leadership. Topics include ethical decision-making, consideration of others, spirituality in the military, and survey Army leadership doctrine. Emphasis on improving oral and written communication abilities. Participation in Physical Fitness training, Leadership Lab, and one weekend Field Training Exercise is required. Lecture 3 hours, Leadership Laboratory 3 hours. Prerequisite: Completion of Military Science Basic Courses or placement credit for the Basic Courses and permission of the Professor of Military Science.

## 4004 LEADER DEVELOPMENT AND ASSESSMENT COURSE (LDAC), 4 hours credit

A four-week camp conducted at an Army post. Open only to (and required of) students who have completed MSL 3013 and 3023. The Leader Development and Assessment Course (LDAC) environment is highly structured and demanding; stressing leadership at small unit levels under varying, challenging conditions. Individual leadership and basic skills performance are evaluated throughout camp. Qualified cadets may attend Airborne, Air Assault, Northern Warfare and Cadet Troop Leader Training between the end of LDAC and the beginning of the fall semester. Prerequisites: MSL 3013 and 3023.

## 4011 LEADERSHIP CHALLENGES/GOAL SETTING LAB, 1 hour credit

Leadership laboratory is a weekly period emphasizing practical application of leadership and military skills. Activities include: rifle marksmanship, map reading and land navigation, team building exercises, physical conditioning and small unit tactics. The availability of an outdoor training area on campus, and the proximity of Fort Sill, allow students to get out of the classroom and apply the skills they have learned in fast paced exercises. Mandatory attendance for Juniors and Seniors. Prerequisite: Leadership Challenges/Goal Setting MSL 4013 or concurrent enrollment. MSL 4013 must be successfully completed before credit is given in this course.

## 4013 LEADERSHIP CHALLENGES AND GOAL SETTING, 3 hours credit

Develops student proficiency in planning and executing complex operations, functioning as a member of a staff and mentoring subordinates. Students explore training management, methods of effective staff collaboration and developmental counseling techniques. Participation in Physical Fitness training, Leadership Lab, and one weekend Field Training Exercise is required. Lecture 3 hours, Leadership Laboratory 3 hours. Prerequisite: Permission of the Professor of Military Science.

## 4021 OFFICERSHIP LAB, 1 hour credit

Leadership laboratory is a weekly period emphasizing practical application of leadership and military skills. Activities include: rifle marksmanship, map reading and land navigation, team building exercises, physical conditioning and small unit tactics. The availability of an outdoor training area on campus, and the proximity of Fort Sill, allow students to get out of the classroom and apply the skills they have learned in fast paced exercises. Attendance is mandatory for Juniors and Seniors. Prerequisite: Officership MSL 4023 or concurrent enrollment. MSL 4023 must be successfully completed before credit is given in this course.

## 4023 OFFICERSHIP, 3 hours credit

Study includes case study analysis of military law and practical exercises on establishing an ethical command climate. Students must complete a semester-long Senior Leadership Project that requires them to plan, organize, collaborate, analyze and demonstrate their leadership skills. Participation in Physical Fitness training, Leadership Lab, and one weekend Field Training Exercise is required. Lecture 3 hours, Leadership Laboratory 3 hours. Prerequisite: Permission of the Professor of Military Science.

## Leadership Laboratory

Leadership laboratory is a weekly period emphasizing practical application of leadership and military skills. Activities include: rifle marksmanship, map reading and land navigation, team building exercises, physical conditioning and small unit tactics. The availability of an outdoor training area on campus, and the proximity of Fort Sill, allow students to get out of the classroom and apply the skills they have learned in fast paced exercises. Attendance is optional for non-ROTC scholarship/non-contracted freshmen and sophomores, but they are always welcome and encouraged to attend. Attendance is mandatory for juniors and seniors.

## DEPARTMENT OF

## Multimedia design

CHAIR - Don Aguilar, Associate Professor
Associate Professors: Johari, Wright-Smith
Assistant Professor: Hardin
The Department of Multimedia Design offers programs leading to the Associate in Applied Science and the Bachelor of Science Degree in Multimedia Design. The two programs are offered in a two-plus-two arrangement. Students may either earn the AAS degree first and proceed to the BS degree or earn the BS degree directly.

## ASSOCIATE IN APPLIED SCIENCE (510) MAJOR IN MULTIMEDIA DESIGN

The purpose of this program is to prepare individuals with technical multimedia development skills to function as team members in the systematic design and development of technology based, interactive, userfriendly instructional applications.
I. GENERAL EDUCATION REQUIREMENTS ..... 18 hours
ENGL 1113, ENGL 1213, POL SC 1113, HIST 1483 or HIST 1493, COMM 1113, MATH 1813 or MATH 1513
II. MAJOR ..... 43 hours
Technical-Occupational Specialty ..... 30 hours
MM 1013, MM 1133, MM 1143, MM 1154, MM 2024, MM 2034, MM 2123, MM 2132, MM 2804
Technical-Occupational Support Courses ..... 7 hours
CIS 1013 and RTV 2104
Technical-Occupational Related Course Work ..... 6 hours
(To be selected by student with approval of academic advisor)
TOTAL ..... 61 hours
BACHELOR OF SCIENCE MAJOR IN MULTIMEDIA DESIGN (420)

The purpose of this program is to prepare individuals with technical multimedia development and management skills. Graduates will be prepared to maximize the opportunities presented by the media explosion through the development of technical multimedia skills and through management training.

[^12]
# Specialty Courses From A.A.S. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30 hours <br> MM 1013, MM 1133, MM 1143, MM 1154, MM 2024, MM 2034, MM 2123, MM 2132, MM 2804 <br> Technical-Occupational Support Courses from AAS <br> 7 hours <br> CIS 1013, RTV 2104 <br> Advanced Specialty Courses <br> MM 3013, MM 3113, MM 4003, MM 4023, MM 4414, MM 4804 <br> 20 hours 

III. SUGGESTED ELECTIVES ..... 18 hours
MGMT 4443 and 15 hours selected from the following: MGMT 2213, TECH 3013, CS 1313, MGMT 3013, COMM 3383, MKTG 3413
IV. RELATED (MM 3203) ..... 3 hours
V. ELECTIVES (Approved by Department Chair) ..... 5 hours
TOTAL ..... 128 hours

## MULTIMEDIA COURSES (MM)

## 1013 FUNDAMENTALS OF MULTIMEDIA DESIGN, 3 hours credit

An introduction to the study of multimedia design, including principles of graphic design; introduction to authoring; on-screen layout; and introduction to authoring tools. With a basic understanding of Instructional Systems Design, students will learn to create desktop and on-screen multimedia applications. This class will also include a brief introduction to authoring software. Prerequisite or concurrent enrollment in CIS 1013. Lecture 2 hours, lab 2 hours.

## 1133 MULTIMEDIA PRODUCTION TECHNIQUES, 3 hours credit

This course familiarizes students with basic techniques, using hardware and software tools to create various media for multimedia productions. Students will learn basic techniques such as scanning and enhancing photographs, creating simple animations and incorporating graphics into presentations with an understanding of display color. Prerequisite: MM 1013 and MM 1143. Lecture 2 hours, lab 2 hours.

## 1143 INSTRUCTIONAL DESIGN, 3 hours credit

Introduction to the systematic design of instruction that includes learner, task and content analysis, writing performance objectives, developing instructional strategies, materials and assessment instruments, and evaluating and revising instructional materials. Lecture 2 hours, lab 2 hours.

## 1154 INTRODUCTION TO MULTIMEDIA AUTHORING, 4 hours credit

Introduction to program logic and problem solving techniques within the context of an authoring tool. This course makes extensive use of structure charts, flow charts and story boarding to illustrate the logic necessary to create instructional materials using authoring software. Prerequisite: MM 1133 and MM 1143 . Lecture 2 hours, lab 3 hours.

## 2024 CORPORATE MULTIṀEDIA PRODUCTION I, 4 hours credit

Planning and development of modern interactive educational applications in a corporate environment using modern learning theory. Students will plan projects using industry best practices in a client-centered; corporate context. They will also produce educational programs conforming to e-learning principles based on cognitive learning theory. This course will incorporate a second authoring tool. Prerequisites: MM 1154; concurrent enrollment: RTV 2104. Lecture 2 hours, lab 4 hours.

## 2034 WEB COMMUNICATIONS AND DESIGN, 4 hours credit

This course introduces students to purpose-driven web browsing and web page creation. Students will incorporate multimedia components into created pages. Prerequisite: CIS 1013. Lecture 2 hours, lab 4 hours.

## 2123 CORPORATE MULTIMEDIA PRODUCTION II, 3 hours credit

An advanced course emphasizing practice in the use of more advanced authoring and delivery techniques while studying current issues in corporate and government instructional media production. Prerequisite: MM 2024. Lecture 2 hours, lab 2 hours.

## 2132 LEGAL AND ETHICAL ISSUES, 2 hours credit

A survey of current ethical and legal issues, such as copyright, that impact the development and use of multimedia instructional material. Lecture 2 hours.

## 2191-3 SPECIAL PROBLEMS IN MULTIMEDIA, 1 - 3 hours credit

Individual and group projects in multimedia. May be repeated with permission of the department chairman. Prerequisite: Permission of the department chair and faculty member supervising the project. Can be taken for a maximum of 6 hours. Lab 2-6 hours.

## 2804 CAPSTONE PROJECT, 4 hours credit

Application of appropriate skills necessary to develop user friendly and instructionally sound interactive, technology based educational applications. Students will be given guidance in setting project goals. This course will provide information for program outcomes assessment and establish a basis for continued followup and evaluation after program completion. Prerequisite or concurrent enrollment MM 2123. Lecture 1 hour, lab 6 hours.

## 3013 ADVANCED COMPUTER GRAPHICS, 3 hours credit

A study of artistic elements and software techniques used to create advanced 2D/3D computer graphics for multimedia products. Prerequisites: MM 1013. Lecture 2 hours, lab 2 hours.

## 3023 WEB PUBLISHING AND GRAPHICS, 3 hours credit

This course helps students develop the creative and critical thinking skills required in a web/animation design and development environment. Students learn to plan for and implement interactivity in their web and animation designs. They are required to incorporate a mixture of audio, video, graphics, and animation dependent on website objectives (e.g., marketing, instructing, or entertainment). Techniques for automating the design process will be covered. State-of-the-art web animation and web-development tools are introduced and used as the catalyst for learning. Lecture 2 hours, lab 2 hours. Prerequisites: Permission of Instructor.

## 3113 DISTANCE LEARNING DEVELOPMENT, 3 hours credit

Development of multimedia instructional materials for distance learning using current technology. Lecture 2 hours, lab 2 hours. Prerequisites: MM 1143, MM 2034 or permission of Department Chair.

## 3203 ADVANCED INSTRUCTIONAL DESIGN, 3 hours credit

An advanced course in instructional systems design (ISD) exploring the relationships between the ADDIE process and various ISD models. Also explored are learning theories underpinning ISD and their application in professional-level designs. Prerequisite: MM 1143. Lecture 2 hours, lab 2 hours.

## 4003 ADVANCED AUTHORING, 3 hours credit

Advanced authoring using scripting languages. Prerequisite: MM 1154 and MM 3013 or concurrent enrollment. Lecture 2 hours, lab 2 hours.

4023 ADVANCED WEB COMMUNICATIONS, 3 hours credit
Advanced web authoring using programming languages. Prerequisite: MM 2034. Lecture 2 hours, lab 2 hours.

## 4191-3 ADVANCED PROBLEMS IN MULTIMEDIA, $1-3$ hours credit

Individual and group projects in multimedia. May be repeated with permission of the department chairman. Prerequisite: Permission of the department chair and faculty member supervising the project. May be taken for a maximum of 6 hours. Lab 2-6 hours.

## 4414 SIMULATION, 4 hours credit

Demonstration of effective methods for visualizing objects and data through designing and creating animations for use in video, multimedia and virtual environments. Prerequisite: MM 3013. Lecture 2 hours, lab 2 hours.

## 4804 CAPSTONE, 4 hours credit

Demonstration of the appropriate skills necessary to direct and manage an instructional materials project. Students will serve as program managers for MM 2104, completing a needs analysis, developing objectives and writing specifications given a training need for an internship. This course will provide information for program outcomes assessment and establish a basis for continued follow-up and evaluation after program completion. Prerequisite: MM 4003, 4414, and 4023 or concurrent enrollment. Lecture 1 hour, lab 6 hours.

## DEPARTMENT OF

 Physical sciencesCHAIR - Danny McGuire, Associate Professor<br>Professors: Bryan, Buckley, Koll, Nalley, Snider, Vitense<br>Assistant Professors: Das, Russell

The Department of Physical Sciences offers programs leading to the Bachelor of Science degree with majors in Chemistry, Chemistry Education, Natural Science and Physics.

## BACHELOR OF SCIENCE DEGREE MAJOR IN CHEMISTRY (340)

Chemistry is central to the study of all modern sciences and is therefore prerequisite to and required by many separate disciplines, even for their introductory courses. Since chemistry as a discipline is designed and structured as a vertical hierarchy (each course follows another and the preceding course is a required prerequisite) it is important to start the study of chemistry early in your college career. A basic year to two years of chemistry are required for entry into most allied health programs such as pharmacy, medical technology, physical and occupational therapy, radiological technology, biotechnology, and environmental sciences. A Bachelor's degree in chemistry may be used to enter industry, teach, fulfill requirements for preprofessional programs such as medicine, dentistry, veterinary medicine, optometry, chemical engineering, and to enter graduate school for the further study of forensic science, chemistry, biochemistry, molecular biology, environmental science and other advanced programs.

At Cameron University there are two basic options for a chemistry program. Each option dictates to some extent the recommended minor and student decision of which option to choose should be based upon their long term occupational goal. There are several possible goals that are not addressed here and that should be discussed further with an advisor. The traditional chemistry program, which uses the Physical Chemistry option (described in the degree outline), will fit most economically (that is fastest, with minimal financial investment) into a Bachelor's degree program with a minor in Mathematics. This is the recommended course of study for those wishing to prepare for industry, engineering, and graduate study. The Biochemistry option is a nontraditional approach and will fit most economically into a Bachelor's degree program with a minor in Biology. This is the recommended course of study for those wishing to prepare for careers in the health industries (Medicine, Osteopathy, Optometry, Dentistry, Veterinary Medicine) because it overlaps and fulfills almost all pre-professional admission requirements as part of the degree plan. Either set of optional courses may be taken in part or in whole as electives in the other program. For graduate study in most areas the Physical Chemistry option is probably the better program although both programs have been received well by graduate institutions. Please note that both degree programs require Physics I, Physics II, and Calculus I in addition to the minimum chemistry requirements.
I. GENERAL EDUCATION REQUIREMENT ..... 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR Minimum of 40 hours27-29 hoursCHEM 1361/1364; 1471/1474; CHEM 2113; CHEM 2232;CHEM 3314; CHEM 3324; PSCI 4442; Analytical elective from
Electives ..... 11-13 hours
Majors must complete one of the following sequences of courses as a part of these electives:
CHEM 4351, CHEM 4353, CHEM 4361, and CHEM 4363 OR
CHEM 4401, CHEM 4403, CHEM 4411, and CHEM 4413
In addition, sufficient electives to complete the 40-hour chemistry degrèe requirement must be taken. CHEM 1004, CHEM 3544 , and CHEM 4303 may not be used as electives. CHEM 3345 may not be used in addition to CHEM 3314/3324. No more than 3 hours of CHEM 4491-4 may be counted toward the 40 hours required for the Chemistry degree.
III. ADDITIONAL REQUIREMENTS ..... 15 hours
All chemistry majors must complete the following three courses, PHYS 1115 (or PHYS 2015); PHYS 1215 (or PHYS 2025) and MATH 2215. Depending upon high school background some students may also need MATH 0013 ,
MATH 0103, MATH 0213 and/or MATH 0115, MATH 1513, MATH 1613 and/or MATH 1715 as prerequisites. Some of these courses may be utilized to satisfy General Education requirements.
IV. MINOR ..... 18 hours
It is strongly recommended that the student select a minor from the fields of Physics, Biology or Mathematics.
V. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.
BACHELOR OF SCIENCE DEGREE MAJOR IN CHEMISTRY EDUCATION (345)
I. GENERAL EDUCATION REQUIREMENT ..... 52 hours
General Education requirements are found on the red striped pages. This degree requires specific courses for general education. Please check with the department for these requirements.
II. MAJOR72 hours
Required Core Courses ..... 32 hours
CHEM 1364, CHEM 1361, CHEM 1474, CHEM 1471, CHEM 2113 , CHEM 2232, CHEM 2441, CHEM 3314, CHEM 3324, CHEM 4403, CHEM 4413, CHEM 44727 hoursAdditional Requirements7 hours
PHYS 1215, PSCI 444233 hours
Required Education Courses33 hours
EDUC 1800, EDUC 3003, SPED 3103, EDUC 3612**, EDUC 3673,EDUC 3733, EDUC 3753*, EDUC 4313*, EDUC 4653*, EDUC 4965**EDUC 4975***Restricted to those students who have been admitted to TeacherEducation. See page 52 of this catalog or the undergraduate educationadvisor for admission requirements.
**Courses taken during professional semester.

## III. ADDITIONAL REQUIREMENTS

Chemistry Education candidates must achieve a grade of C or better in all major courses (required core courses and required education courses) in order to receive credit toward a degree. If a grade of $\mathrm{D}, \mathrm{F}$, or U is achieved, the course must be repeated.

Chemistry Education candidates must demonstrate foreign language proficiency (listening and speaking) at the novice-high level as defined by the American Council on the Teaching of Foreign Languages by passing a Department of English and Foreign Languages proficiency test or by taking a foreign language course.

## Teacher Licensure/Certification

The student who completes the requirements for this degree and passes the state tests for certification in Chemistry will be eligible to apply for a standard teaching license.

## BACHELOR OF SCIENCE DEGREE MAJOR IN NATURAL SCIENCE (380)

The Natural Science degree program may be used to satisfy most pre-admission requirements for those wishing to prepare for careers in the health industries (Medicine, Osteopathy, Optometry, Dentistry, Veterinary Medicine).

Many students majoring in the sciences intend to gain admission to a health related professional school. Students must recognize that admission to such programs is very competitive and also involves a comprehensive personal evaluation of all applicants. Limited class size as well as tough admission standards rule out many applicants. Thus, students with these career goals should plan early in their undergraduate program for a "significant other" career option.
I. GENERAL EDUCATION REQUIREMENT 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR-MINOR ..... 54 hours
Required Courses ..... 42-45 hoursBIOL 1364 and BIOL 1474 or BIOL 1114 and BIOL 1124 ,Biology electives ( 4 hours) selected from 2000 or abovelevel courses, CHEM 1364/1361, and CHEM 1474/1471,CHEM 3314 and 3324 sequence or CHEM 3345 ,
PSCI 4442, PHYS 1115 or PHYS 2015, PHYS 1215 orPHYS 2025, PHYS 3003. Electives must be selected suchthat a minimum of 24 semester hours will be earned in oneof the above areas and a total of 52 semester hours areearned in Biology, Chemistry, and Physics. Dependingupon high school background some students may alsoneed MATH 0013, MATH 0103, MATH 0213 and/orMATH 0115, MATH 1513, MATH 1613 and/orMATH 1715 as prerequisites. Some of these coursesmay be utilized to satisfy General Education requirements.

## BACHELOR OF SCIENCE DEGREE MAJOR IN PHYSICS (385)

Physics is one of the basic sciences required by many disciplines. The Physics program at Cameron University emphasizes the multidisciplinary approach and meets the needs of most pre-engineering programs. Graduates of the program generally enter industry (aerospace and defense industries are most common) or go on to graduate studies in physics, mathematics, computer science or other related areas. The Physics program requires that a minor in Mathematics be completed as fulfillment of the prerequisite courses for the upper division physics courses. Flexibility in the program is obtained by allowing the student to choose courses for study from the areas of chemistry, technology, and mathematics to fulfill degree requirements.
I. GENERAL EDUCATION REQUIREMENT 50 hours
General Education requirements are found on the red striped pages.
II. MAJOR ..... 45 hours
Required Courses . . . . . . . . . . . . . . . . . . . ........................... 33 hours
PHYS 1115 or PHYS 2015, PHYS 1215 or PHYS 2025, PHYS 3003, PHYS 3011, PHYS 3024, PHYS 3031, PHYS 3303, PHYS 3403, PHYS 4113, PHYS 4403, PSCI 4442
Required Electives ..... 12 hours(A minimum of 6 semester hours must be taken from Group A Electivesand 6 semester hours from Group B Electives.)
GROUP A ELECTIVESCS 3344, CS 3443, MATH 2244, MATH 3253, EET 2013, EET 3133,CHEM 2113, CHEM 3343, CHEM 4024
GROUP B ELECTIVES
PHYS 3033, PHYS 4452, PHYS 4491-3, CHEM 4353, CHEM 4351, CHEM 4363, CHEM 4361, MATH 3013, MATH 4433
III. ADDITIONAL REQUIREMENTS 27 hours
All physics majors must complete the following six courses, CHEM 1364/1361, CHEM 1474/1471, MATH 2215, MATH 2235, MATH 2244, and MATH 3253. Depending upon high school background some students may also need MATH 0013, MATH 0103, MATH 0213 and/or MATH 0115 , MATH 1513 , MATH 1613 and/or MATH 1715 as prerequisites. Some of these courses may be used to satisfy General Education requirements.
IV. MINOR ..... 18 hours
(It is strongly recommended that the student select a minor from the fields of Mathematics, Chemistry, or Electronics.)
V. ELECTIVES TO COMPLETE 128 HOURS REQUIRED FOR GRADUATION.

## COURSES

The course curricula to complete a degree in the Department of Physical Sciences designed to be studied in a sequential manner. The prerequisites are advisory and reflect this sequence. These courses are taught using knowledge and skills that the student is expected to retain from previous studies. Taking Physical Sciences courses in an improper sequence, without the recommended prerequisites, and/or with an extended period
of time between these courses will require significant additional effort by the student and increase the difficulty of the program.

## ASTRONOMY COURSE (ASTR)

## 1104* CONTEMPORARY ASTRONOMY, 4 hours credit

A one-semester survey course in astronomy. Topics are developed around observational astronomy, how astronomers understand the universe using models, astronomical and physical concepts which provide a fundamental understanding. The course surveys the solar system, our galaxy and near stars, and stellar characteristics. Lecture 4 hours. Prerequisite: At least one year of high school algebra.

## CHEMISTRY COURSES (CHEM)

## 1004* DESCRIPTIVE CHEMISTRY, 4 hours credit

A one-semester introductory course in chemistry. Principal concepts and theories of chemistry are examined from the layman's point of view. This course is highly recommended for those planning to take CHEM 1364/1361 who have not had previous chemistry. Credit earned in this course cannot be counted towards a science major or minor. This course does not fulfill chemistry requirements for pre-professional programs. Lecture 4 hours. Prerequisite: At least one year of high school algebra.

## 1015* GENERAL CHEMISTRY I, 5 hours credit

A beginning course in the fundamental concepts and theories of chemistry and the application of these principles to selected elements and compounds. Students who have had high school chemistry and a composite score of 18 on the ACT test should take CHEM 1364 (Exception: A student with an ACT MATH score of 26 or above who has not had high school chemistry should take CHEM 1364.) Lecture 4 hours, laboratory 2 hours. Prerequisite: Two years of high school algebra or MATH 1513 or current enrollment.

## 1225* GENERAL CHEMISTRY II, 5 hours credit

A continuation of CHEM 1015. Lecture 4 hours, laboratory 2 hours. Prerequisite: CHEM 1015.

## 1361* GENERAL CHEMISTRY LABORATORY I, 1 hour credit

Selected laboratory experiences to test application of chemical theory. Laboratory 2 hours. Prerequisite: CHEM 1364 or concurrent enrollment. CHEM 1364 must be successfully completed before credit is given in this course.

## 1364* GENERAL CHEMISTRY I, 4 hours credit

Principles of general chemistry, with emphasis on theory and its application to structure and reactions. Lecture 4 hours. Prerequisite: High school chemistry or an ACT math score of 26 or above, or CHEM 1004. CHEM 1361 must be successfully completed before credit is received in this course.

## 1471* GENERAL CHEMISTRY LABORATORY II, 1 hour credit

Selected laboratory experiments to test applications of kinetics, thermodynamics, equilibrium, and quantitative analysis. Laboratory 2 hours. Prerequisite: CHEM 1361 and CHEM 1474 or concurrent enrollment. CHEM 1474 must be successfully completed before credit is given in this course.

## 1474* GENERAL CHEMISTRY II, 4 hours credit

A continuation of CHEM 1364. Lecture 4 hours. Prerequisite: CHEM 1364. CHEM 1471 must be successfully completed before credit is given in this course.

## 2113* FUNDAMENTALS OF ANALYTICAL CHEMISTRY, 3 hours credit

An introductory course in analytical chemistry emphasizing volumetric and electrochemical methods. Spectroscopic and chromatographic techniques are also introduced. Lecture 3 hours. Prerequisites: CHEM 1225 or CHEM 1474 or equivalents.

## 2222* QUALITATIVE ANALYSIS, 2 hours credit

Analysis for common cations and anions by semi-micro laboratory techniques. Lecture 1 hour, laboratory 4 hours. Prerequisite: CHEM 1474 and CHEM 1471 or concurrent enrollment.

## 2232* QUANTITATIVE ANALYSIS LABORATORY, 2 hours credit

Laboratory techniques of quantitative analysis including volumetric and spectroscopic methods. Laboratory 6 hours. Prerequisite: CHEM 2113 or concurrent enrollment. CHEM 2113 must be successfully completed before credit is received in this course.

## 2441 WORKING SAFELY WITH CHEMICALS, 1 hour credit

Seminars, discussion, and real-world activities will focus on regulations and protocols governing laboratory safety and working safely with chemicals. Students will be assessed on compliance regulations, identification of exposures, and safeguarding exposures. Each student will also be asked to evaluate safety policies, emergency preparedness, and hazard recognition. The objective is to prepare students for a safe laboratory experience and be more responsible and knowledgeable employees after graduation. Does not count toward Physical Science General Education requirement.

## 3314* ORGANIC CHEMISTRY I, 4 hours credit

Nomenclature, structure, reactions, stereochemistry, and mechanisms of both aliphatic and aromatic compounds. The first semester of a two semester sequence. Lecture 3 hours, laboratory 3 hours. Prerequisites: CHEM 1225 or CHEM 1474 and CHEM 1471 or equivalent.

## 3324* ORGANIC CHEMISTRY II, 4 hours credit

A continuation of CHEM 3314. The second semester of a two-semester sequence. Lecture 3 hours, laboratory 3 hours. Prerequisite: CHEM 3314.

## 3334* CHEMISTRY OF WATER AND WASTEWATER, 4 hours credit

Inorganic chemistry of natural water supplies, pollution and water treatment. Standard methods and state environmental quality references are used. Lecture 2 hours, laboratory 6 hours. Prerequisite: CHEM 2113.

## 3343* ORGANIC ANALYSIS, 3 hours credit

Characterization, derivatization, and identification of unknowns consisting of one or more organic compounds. Instrumental methods of analysis as applied to the identification of organic compounds, including practical laboratory work with IR, NMR, GLC, and TLC. Lecture 1 hour, laboratory 6 hours. Prerequisite: CHEM 3324 or concurrent enrollment.

## 3345* ORGANIC CHEMISTRY, 5 hours credit

A one-semester introduction to the fundamentals of organic chemistry and methods of preparation, reactions, and uses of cyclic, acyclic, aromatic, and heterocyclic compounds. Lecture 4 hours, laboratory 3 hours. Prerequisites: CHEM 1225 or CHEM 1474 and 1471 or equivalent.

## 3544* BASIC BIOCHEMISTRY WITH PHYSICAL AND ANALYTICAL PRINCIPLES, 4 hours credit

A terminal course which completes a basic background in chemistry by emphasizing the organic, analytical and physical chemistry of compounds of interest in biology, agriculture and home economics. Basic analytical theory and fundamental thermodynamics and kinetics as applied to organic and biological molecules will be studied. Lecture 3 hours, laboratory 3 hours. Prerequisite: CHEM 3345 or equivalent. May not be substituted for any chemistry major requirements.

## 4024* INSTRUMENTAL METHODS OF ANALYSIS, 4 hours credit

Theoretical and laboratory study of modern analytical techniques, both qualitative and quantitative, with emphasis on instrument types, their components and methodology. Lecture 2 hours, laboratory 6 hours. Prerequisite: CHEM 4353.

## 4303* DRUGS AND THE HUMAN BODY, 3 hours credit

A course for non-science majors designed to provide the information to establish a foundation in the knowledge of drugs widely used or abused. It provides information about the types of drugs encountered,
how drugs act in the body, and how they impact on society. The course is especially recommended for education majors, both elementary and secondary and individuals who intend to select careers related to work with youth. May not be used for Natural Science, Chemistry majors or minors. Lecture 3 hours.

4332* ADVANCED INORGANIC CHEMISTRY LAB, 2 hours credit
An introduction to classical inorganic chemical syntheses, purification methods and analyses. Techniques utilized in the identification of compounds include Fourier transform infrared, ultra-violet and visible, multinuclear magnetic resonance and mass spectroscopies. Some synthetic procedures utilize an inert atmosphere approach. Laboratory 6 hours. Prerequisite: CHEM 4334 or concurrent enrollment.

## 4334* ADVANCED INORGANIC CHEMISTRY, 4 hours credit

An advanced study of the principles of inorganic chemistry. Theoretical concepts to be included in the study are chemical bonding, acid-base chemistry, coordination chemistry, crystal field theory, and molecular orbital theory. An investigation into periodicity of the elements in terms of the effect of atomic size, ionic size, and charge on various chemical properties will be pursued. Lecture 4 hours. Prerequisite: CHEM 3324, PHYS 1215, and MATH 2215.

## 4351* PHYSICAL CHEMISTRY LABORATORY I, 1 hour credit

Apparatus, method and calculations employed in physio-chemical measurements. Laboratory 3 hours. Prerequisite: CHEM 4353 or concurrent enrollment and CHEM 2232.

## 4353* PHYSICAL CHEMISTRY I, 3 hours credit

The study of thermodynamics particularly as applied to chemical systems. Prerequisites: CHEM 1474/1471, PHYS 1115 and MATH 2215.

4361* PHYSICAL CHEMISTRY LABORATORY II, 1 hour credit
A continuation of CHEM 4351. Laboratory 3 hours. Prerequisite: CHEM 4363 or concurrent enrollment.

## 4363* PHYSICAL CHEMISTRY II, 3 hours credit

A continuation of CHEM 4353. Study of kinetics, quantum mechanics, and statistical thermodynamics as related to chemical systems. Lecture 3 hours. Prerequisite: CHEM 4353.

## 4401* BIOCHEMISTRY I LABORATORY, 1 hour credit

Qualitative and quantitative examination of biochemical materials and reactions. Laboratory 3 hours. Prerequisites: CHEM 2232 and CHEM 4403 or concurrent enrollment.

## 4403* BIOCHEMISTRY I, 3 hours credit

An introduction to the chemistry and metabolism of carbohydrates, lipids, and proteins. Basic concepts of biochemistry of vitamins and enzymes, biological oxidations, bioenergetics. Lecture 3 hours. Prerequisite: CHEM 3324 or CHEM 3345.

## 4411* BIOCHEMISTRY II LABORATORY, 1 hour credit

A continuation of Biochemistry Laboratory CHEM 4401. Laboratory 3 hours. Prerequisites: CHEM 4401, CHEM 4413 or concurrent enrollment.

## 4413* BIOCHEMISTRY II, 3 hours credit

A continuation of Biochemistry, CHEM 4403, with emphasis on the catabolic routes of metabolism. Lecture 3 hours. Prerequisite: CHEM 4403.

## 4453* ADVANCED GENERAL CHEMISTRY, 3 hours credit

A course for teachers. Reviews modern theories and concepts applicable to beginning chemistry courses. Lecture 3 hours. Prerequisite: Permission of the department.

## 4472 METHODS OF TEACHING PHYSICAL SCIENCES, 2 hours credit

Methods in teaching the physical sciences for secondary school. Lecture and laboratory demonstrations, 2 hours. Prerequisites: 15 hours of college chemistry and departmental permission. Teacher Certification students should be admitted to teacher education prior to enrollment in this course.

4481-3 ADVANCED TOPICS IN CHEMISTRY, 1 -3 hours credit
This lecture-based course will focus on a topic or topics of current interest to the chemical profession. Prerequisite: CHEM 3324 or CHEM 3345 or concurrent enrollment.

## 4491-4 SPECIAL PROBLEMS IN CHEMISTRY, 1 -4 hours credit

Training in independent work. Experimental investigations of an assigned problem. Normally graded on S/U basis. Laboratory 3-12 hours. Prerequisite: Departmental permission.

## GEOLOGY COURSES (GEOL)

## 1014* PHYSICAL GEOLOGY, 4 hours credit

Emphasis is on plate tectonics, the rock cycle, and the hydrologic cycle. Discussion involved igneous, sedimentary and metamorphic rocks; results of erosion of the earth's surface by streams, oceans, winds, glaciers; phenomena of mountains, volcanoes, earthquakes and interior of the earth. Available field trips. Lecture 3 hours, laboratory 2 hours.

## 1024* HISTORICAL GEOLOGY, 4 hours credit

Geological history of the earth as revealed in the character and fossil content of the rocks. Field trips. Lecture 3 hours, laboratory 3 hours.

## PHYSICS COURSES (PHYS)

## 1004* DESCRIPTIVE PHYSICS, 4 hours credit

A survey course in general physics. Topics include mechanics, heat, sound, electricity, magnetism, light, and modern physics. For students who wish only four semester hours of physics. Credit earned in this course cannot be counted towards a science major or minor. Lecture 4 hours. Prerequisite: At least one year of high school algebra.

## 1115* PHYSICS I, 5 hours credit

A beginning lecture and laboratory study of the fundamental principles of mechanics, heat, and sound. Lecture 4 hours, laboratory 2 hours. Prerequisite: MATH 1613 or MATH 1715.

## 1215* PHYSICS II, 5 hours credit

A continuation of PHYS 1115. A lecture and laboratory study of the fundamental principles of electricity, magnetism, light, and modern physics. Lecture 4 hours, laboratory 2 hours. Prerequisite: PHYS 1115.

## 2015* PHYSICS I FOR SCIENCE AND ENGINEERING MAJORS, 5 hours credit

A lecture-laboratory course of general physics taught with calculus. Includes topics from mechanics, heat and sound. Lecture 5 hours, laboratory 2 hours. Prerequisite: MATH 2215 or concurrent enrollment.

## 2025* PHYSICS II FOR SCIENCE AND ENGINEERING MAJORS, 5 hours credit

A continuation of PHYS 2015. Includes topics from electricity, light, and modern physics. Lecture 5 hours, laboratory 2 hours. Prerequisite: PHYS 2015.

## 2213* SELECTED TOPICS IN GENERAL PHYSICS, 3 hours credit

A survey treatment of the basic topics in general physics using calculus. Designed for those students who have taken the non-calculus general physics sequence as preparation for the upper division physics courses. NOT open to students with credit in PHYS 2015 or PHYS 2025. Lecture 3 hours. Prerequisites: PHYS 1215 and MATH 2215.

## 3003* MODERN PHYSICS I, 3 hours credit

An introduction to the ideas and experiments of 20th Century physics. Topics include special relativity, particle properties of waves, wave properties of particles, the Bohr Theory of the atom, and an introduction to quantum mechanics. Prerequisites: MATH 2215 or concurrent enrollment and PHYS 1215.

## 3011* MODERN PHYSICS I LABORATORY, $\boldsymbol{I}$ hour credit

Selected experiments in modern physics, such as Bragg's Law experiment, Michelson's Interferometer, Gamma Ray Spectroscopy, Hall Effect, Statistics of Data. Laboratory 3 hours. Prerequisite: PHYS 3003 or concurrent enrollment.

## 3024 ELECTRICAL MEASUREMENTS AND ELECTRONICS, 4 hours credit

Principles and application of dc and ac circuits analysis, measuring instruments, operational amplifiers, and various solid state devices. Lecture 4 hours. Prerequisites: PHYS 1215, MATH 2215.

3031 ELECTRICAL MEASUREMENTS AND ELECTRONICS LABORATORY, 1 hour credit
Construction and testing of electrical circuits which are applications of the devices studied in PHYS 3024. Laboratory 3 hours. Prerequisite: PHYS 3024 or concurrent enrollment.

## 3033* MODERN PHYSICS II, 3 hours credit

A review of the historical background of nuclear physics coupled with modern theories and concepts of the nucleus, elementary quantum mechanics, and an introduction to solid state theory and its applications. Lecture 3 hours. Prerequisite: PHYS 3003.

## 3303* MECHANICS, 3 hours credit

A vector analytical approach to the mechanics of particles, systems of particles, and rigid bodies. Lecture 3 hours. Prerequisite: MATH 3253 and PHYS 1115.

## 3403* HEAT AND THERMODYNAMICS, 3 hours credit

An examination of the principles of energy transfer due to temperature differences. Topics include temperature and temperature scales, equations of state, the three laws of thermodynamics, entropy, thermodynamic potentials, and kinetic theory. Prerequisites: MATH 2235 and PHYS 1215.

## 4113* ELECTRICITY AND MAGNETISM, 3 hours credit

A study of electrostatic fields and potentials, dielectrics, currents, magnetic fields, and Maxwell's equations. Methods of vector calculus are introduced and used extensively. Lecture 3 hours. Prerequisites: MATH 2244 and PHYS 1215.

## 4403* LIGHT, 3 hours credit

A study of geometrical and physical optics. Topics include reflection, refraction, lenses, wave theory, interference, diffraction, dispersion, and polarization. Lecture 3 hours. Prerequisites: PHYS 1215 and MATH 2215.

## 4452* ADVANCED LABORATORY, 2 hours credit

Experiments in heat, mechanics, optics, nuclear physics, and solid-state physics. Laboratory 6 hours. Prerequisite: Departmental permission.

## 4491-3 SPECIAL PROBLEMS, 1 - 3 hours credit

An individual study course of advanced nature. Subject material varies with background and interests of the student, and may be either class work or laboratory. Laboratory work will be of research quality with individual guidance from a faculty member. Prerequisites: Normally graded on S/U basis. 10 hours of College Physics and permission of department.

## PHYSICAL SCIENCE COURSES (PSCI)

## 1055* GENERAL PHYSICAL SCIENCE, 5 hours credit

A lecture-demonstration course designed for students with a non-scientific background. The course attempts to integrate the various areas of physical science (physics, chemistry, astronomy and geology) into a comprehensible whole. This course is designed for non-science majors. Lecture/demonstration 5 hours. Prerequisite: One year of high school algebra or equivalent.

## 4442* LITERATURE FOR PHYSICS AND CHEMISTRY, 2 hours credit

Introduction to the library resources of physical and biological sciences with emphasis on chemistry and physics. Use of the original literature, abstracts, and applications. Development and oral presentation of a research paper and seminar attendance. The final exam is the program assessment instrument. Students taking the course prior to their last year of courses will receive an I for the course and take the final during their last semester prior to graduation. Lecture 2 hours. Prerequisite: Senior standing with a major in chemistry, physics, or natural science.

* Liberal arts \& sciences course.


# SUPPORT SERVICES DIVISION 

Frank Zittle, Director

# ALLIED HEALTH AND INTERDISCIPLINARY STUDIES-AS AND BS Debbie Crossland, Advisor 

EDUCATIONAL OUTREACH ORGANIZATIONAL LEADERSHIP-BS<br>Lorie Garrison, Coordinator

SOUTHWEST OKLAHOMA AREA HEALTH EDUCATION CENTER SwAHEC<br>Joe Langley, D.Min., Director Jenny Breeden, Programs Coordinator, SwAHEC Lora Young, SwAHEC Program Assistant

The Support Services Division provides quality services to meet the academic and regional community needs for Cameron University constituents by: providing advisement for students in Allied Health, Interdisciplinary Studies, and Organizational Leadership; providing support services to academic schools to strengthen higher education programs delivered in the region; increasing awareness of health care professions and support of learning opportunities for regional health care providers.

## UNIVERSITY INTERDISCIPLINARY DEGREES

Cameron University offers the Bachelor of Science Degree and the Associate Degree in Science with a major in Interdisciplinary Studies. These programs are designed to serve active duty military personnel and goal directed students whose educational needs are not met by one of the University's present majors.

## Procedures

1. Contact the Office of Support Services to make an appointment with the Allied Health and Interdisciplinary Studies Advisor to create a plan of study. Plans must be approved by the academic department for each area of concentration and by the director.
2. Each person admitted to the program will be assigned an advisor and committee member (if needed) to (a) visit with the student to clarify goals and objectives and (b) develop a program of study.
3. Changes in the plan of study must be approved by the advisor and director.
4. The candidates for graduation must submit a copy of the approved plan of study to the Registrar two semesters prior to planned graduation date to check for compliance with graduation requirements.

## BACHELOR OF SCIENCE DEGREE INTERDISCIPLINARY STUDIES (360)

A student may apply for admission to this program during or after the semester in which 24 semester hours of credit (including transfer and military credit) are completed. A minimum of 24 semester hours must be completed after admission to the degree program. Students must meet computer literacy requirements of at least one of their areas of concentration or complete CIS 1013. This degree may or may not prepare a student for a particular occupation or entry into a graduate or professional school.
I. GENERAL EDUCATION REQUIREMENT ..... 50 hours
II. CONCENTRATION ..... 45 hours
Courses selected from two disciplines which in their aggregate comprise a rational combination of skills and concepts. A minimum of 25 semester hours must be upper division courses, 12 of which must be obtained from Cameron.
III. ELECTIVES ..... 33 hours
ASSOCIATE IN SCIENCE DEGREE INTERDISCIPLINARY STUDIES (365)

A student may apply for admission to this program during or after the semester in which 12 semester hours of credit are completed (including transfer and military credit). A minimum of 12 semester hours must be completed after admission to the degree program. Students must meet computer literacy requirements of at least one of their areas of concentration or complete CIS 1013. This degree may or may not prepare a student for a particular occupation or entry into a baccalaureate degree program.
I. GENERAL EDUCATION REQUIREMENT ..... 37 hours
English Composition ..... 6 hours
ENGL 1113 English and ENGL 1213
American History and U.S. Government 6 hours
PS 1113 and HIST 1483 or HIST 1493
Science 6 hours
One course must be a laboratory science
Mathematics (MATH 1513 or above) ..... 3 hours
Humanities ..... 6 hours
Electives sufficient to complete 37 hours
At least one course from following areas: Psychology, Social Science,Foreign Languages, Fine Arts
II. CONCENTRATION 21-23 hours
Courses selected from two disciplines which in their aggregate comprise a rational combination of skills and concepts
III. ELECTIVES sufficient to complete ..... 60 hours
ASSOCIATE IN SCIENCE DEGREE
INTERDISCIPLINARY STUDIES/PRE-BACCALAUREATE NURSING (366)
(In cooperation with the University of Oklahoma College of Nursing)

This program is planned in cooperation with the University of Oklahoma College of Nursing. To be eligible to apply for admission to the baccalaureate nursing program, the graduate of this program must have a minimum cumulative GPA of 2.5 on a 4.0 scale and must have a minimum grade of " C " in all courses identified with *. Associate of Science graduates who meet the stated requirements will be eligible to be considered for admission to the University of Oklahoma College of Nursing's baccalaureate nursing program. NOTE: A student planning for admission to the nursing program at another college or university should consult an advisor at that institution each semester to get current requirements. Students will demonstrate computer literacy by completing CIS 1013 or its equivalent. Nursing courses cannot be used as a minor for degrees granted by Cameron University.
I. GENERAL EDUCATION REQUIREMENT

39-40 hours
II. CONCENTRATION 21 hours
III. ELECTIVES To Total 67 hours
TOTAL ..... 67 hours
ASSOCIATE IN APPLIED SCIENCE NURSING DEGREE WESTERN OKLAHOMA STATE COLLEGE (In cooperation with the Western Oklahoma State College)

This program is planned in cooperation with the Western Oklahoma State College. To be eligible to apply for admission to the associate degree nursing program, the applicant for this program must have a minimum cumulative GPA of 2.0 on a 4.0 scale and must have a minimum grade of " C " in all Technical-Occupational Support and Related courses. NOTE: A student planning for admission to the nursing program at another college or university should consult an advisor at that institution each semester to get current requirements. Nursing courses cannot be used as a minor for degrees granted by Cameron University.

## PREREQUISITE COURSES:

| MATH | 1513 | College Algebra |
| :--- | :--- | :--- |
| BIOL | 2304 | Human Anatomy |


| BIOL | 2304 L | Human Anatomy Lab |
| :--- | :--- | :--- |
| CHEM | 1364 | General Chemistry 1 |
| CHEM | 1361 | General Chemistry 1 Lab |
| BIOL | 2134 | Human Physiology |
| BIOL | 2134 L | Human Physiology Lab |
| CIS | 1013 | Introduction to Computer Information Systems |
| PSYCH | 1113 | General Psychology |
| ENGL | 1113 | English Composition I |
| POLSC | 1113 | American Federal Government |
| HIST | 1483 or | U.S. History |
|  | 1493 |  |

## ASSOCIATE IN APPLIED SCIENCE DEGREE RESPIRATORY CARE (575)

This program is a collaborative offering between Cameron University and the Great Plains Technology Center.
I. GENERAL EDUCATION REQUIREMENT ..... 18 hours
ENGL 1113 3 hours
HIST 1483 or HIST 1493 ..... 3 hours
PS 1113 ..... 3 hours
MATH 1513 ..... 3 hours
COMM 1113 ..... 3 hours
Elective ..... 3 hours
II. SUPPORT AND RELATED COURSES ..... 14 hours
BIOL 2034 \& 2034L ..... 4 hours
CHEM 1004 ..... 4 hours
PHYS1004 ..... 4 hours
ELECTIVE(S) ..... 6 hours
III. TECHNICAL OCCUPATIONAL SPECIALTY ..... 32 hours
Great Plains Technology Center Respiratory Care Program
TOTAL ..... 65 hours

## BACHELOR OF SCIENCE DEGREE ORGANIZATIONAL LEADERSHIP (775)

Students who successfully complete the program are granted a bachelor of science in organizational leadership. This degree prepares students for success in government, nonprofit, corporate or industrial careers. The curriculum consists of skills and theory regarding organizational behavior, ethics, interpersonal skills, management, finance and communication skills. State business and education leaders created the degree program so working Oklahomans can advance their careers, increase their incomes and build Oklahoma's economy.
I. GENERAL EDUCATION REQUIREMENT 40-45 hours
II. MAJOR/MINOR
Organizational Leadership Courses
ORGL 3113 Foundations of Organizational Leadership \& Personal Development ..... 3 hours
ORGL 3223 Professional Communication ..... 3 hours
ORGL 3333 Data Analysis and Interpretation ..... 3 hours
ORGL 3443 Survey of Fiscal Management ..... 3 hours
ORGL 4113 Ethics and Organizations ..... 3 hours
ORGL 4223 The Individual, The Organization, and Society ..... 3 hours
ORGL 4333 Leading and Managing ..... 3 hours
ORGL 4443 Markets and Stakeholders ..... 3 hours
ORGL 4553 Capstone ..... 3 hours
ORGL 4993 Professional Internship (Optional) 3 hours
Cameron University Focus CoursesStudents will complete 12 to 15 hours from the list of courses detailed below. Those who completethe internship (ORGL 4993) will complete 12 hours, and those who do not complete the internshipwill complete 15 hours of the courses below.
COMM 3313, COMM 3353, COMM 3383, COMM 3393, COMM 3633, COMM 3712, COMM3833, COMM 4623, COMM 4723, JOUR 3043, JOUR 3343, PUBL 3823
III. PROFESSIONAL ELECTIVE AND FREE ELECTIVE 37-42 hours **
TOTAL 124 hours
**Courses could include prior academic credit on transcript and/or up to 30 hours of extra institutional credit through CLEP, DANTES, military or prior learning assessment (maximum of 15 hours in this category).

## ORGANIZATIONAL LEADERSHIP COURSES (ORGL)

## 3113 FOUNDATIONS OF ORGANIZATIONAL LEADERSHIP AND PERSONAL DEVELOPMENT, 3 hours credit

This course is an introduction to the Organizational Leadership Bachelor of Science Program. Essential components will include: overview of program expectations; principles of adult learning; resources for success including library, campus, online resources and mentoring relationships; personal wellness/stress and time management techniques; study and test-taking skills; and basic computer skills for working in an online environment.

## 3223 PROFESSIONAL COMMUNICATION, 3 hours credit

A study of communication in the workplace within a framework of organizational ethics. Essential components and course content include: listening, verbal and nonverbal communication, written expression, and professional presentation.

## 333 DATA ANALYSIS AND INTERPRETATION 3 hours credit

This course will enable the student to develop an understanding of the application and interpretation of basic data analysis. Essential components and course content will include basic data analysis from a user perspective. Hands-on exercises will enable students to utilize Excel to solve problems and interpret results.

## 3443 FOUNDATION OF FISCAL MANAGEMENT, 3 hours credit

A managerial overview of fiscal management within organizations. Essential components and coursework content will include: understanding the components and articulation of financial statements, knowledge and application of financial ratios leading to an understanding of organizational performance across time and in comparison to industry standards, utilization of financial information in the acquisition of capital and budgeting decisions, and rudimentary understanding of cash flows.

## 4113 ETHICS AND ORGANIZATION, 3 hours credit

This course is designed to examine the dynamics of workplace and personal ethics through the study of basic philosophical theories. Essential components and course content will include: leadership in the context of self-governance, responsibility adherence to principles, integrity and constancy of purpose. Current case studies will be used to apply ethical theories.

## 4223 THE INDIVIDUAL, THE ORGANIZATION, AND SOCIETY, 3 hours credit <br> An examination of contemporary issues that affect organizations. Essential topics include environmental

 stewardship, social responsibility of the organization, effects and implications of globalization, the status of individual freedom within the organization, diversity, and the ramifications of technological change.
## 4333 LEADING AND MANAGING, 3 hours credit

This course is a study of theories that influence leadership and management with application to a variety of work situations. Essential components and coursework content will include: basic leadership and behavior styles, negotiation, critical thinking, change, conflict resolution, ethics and social responsibility and diversity in the workplace. Assessment of personal leadership abilities and personality traits will be included.
4443 MARKETS AND STAKEHOLDERS 3 hours credit
This course introduces the student to the concept of markets and stakeholders. Essential components and course content will include: an overview of competitive markets, buyer behavior, development of new markets and products, marketing communication, distribution channels, pricing and marketing mix strategies. It will include a discussion of external environmental factors and stakeholder analysis. Students will be able to evaluate market needs, select target markets and develop an appropriate market.

4553 CAPSTONE, 3 hours credit
This course provides the student the opportunity to integrate concepts and theories covered in the core with their area of focus. Students will design and implement a capstone project related to their area of focus culminating in a written and oral presentation. This course must be taken in the student's final enrollment period.
4993 INTERNSHIP IN ORGANIZATIONAL LEADERSHIP, 3 hours credit
Supervised professional-level assignment with an organization, firm, government agency, or not-for-profit entity within the selected area of focus. Prerequisites: All core courses except for ORGL 4553, Capstone. Permission of instructor.

## UNIVERSITY COURSES (UNIV)

## 1000 ORIENTATION, 0 hour credit

Designed to provide survival-level information to the new student. An overview of the physical facilities and organizations of the University, policy, procedures, student services, and the library are presented. 2 clock hours.

## 1001 INTRODUCTION TO UNIVERSITY LIFE, 1 hour credit

A course designed to acquaint the student with the educational and social environment of Cameron University and to provide the skills necessary for transition to university life. Recognition and development of interests and aptitudes; clarification of academic/career goals; development of a student's academic plan are covered. Resources, decision making, and time management are also stressed. Lecture 1 hour. Prerequisite: UNIV 1000.

## 1011 CAREER DEVELOPMENT, 1 hour credit

Designed to encourage and assist students in the exploration of their interests, values, skills, personal assets, and life goals as they relate to general economic conditions and employment trends. Lecture 1 hour.

## 2211-5 SPECIAL STUDIES, 1 - 5 hours credit

A study of special lower-division areas or problems. Individual course offerings will vary from department to department.

## 3001 JOB SEEKER SKILLS, 1 hour credit

Designed for students in their junior or senior year of the traditional four year degree program or the final semester of an associate degree program. Students explore career opportunities beyond graduation and develop a personal job search strategy. Correspondence, resume development, and interview techniques constitute a major portion of the course content. Lecture 1 hour. Prerequisite: Junior standing.

## 4211-5 SPECIAL STUDIES, 1 - 5 hours credit

An intensive study of special upper-division areas or problems. Individual course offerings will vary from department to department.

## MINORS

A minor for Bachelor of Arts and Bachelor of Science Degree programs consists of a minimum of 18 semester hours in an approved subject area. Defined minors are those for which a specific set of courses is recommended. Other approved minor programs are structured through the advisement process subject to the approval of the chair of the department which offers the courses. Minors which include courses from multiple departments are approved by the dean of the school which offers the majority of the program. Transfer students may use credits earned at other institutions to fulfill minor requirements. A transfer student who desires to minor in an area not listed below may do so, providing Cameron University offers at least 8 semester hours in the subject area. A student may not minor in Education.

## APPROVED MINOR PROGRAMS

*Accounting
Agriculture
Agricultural Mechanics
Agronomy
Animal Science
*Art
*Art History
*Athletic Coaching
*Biology
*Chemistry
Comp. Aided Design Draft.
*Computer Science
Comp. Information Sys.
*Corrections
*Criminal Justice
*Driver \& Safety Education
*Economics
Electronic Engineering
Technology
Engineering Design
Technology
English
*Environmental Studies
*Ethnic Studies
*Family Science
*Finance
*Foreign Language French
*General Business
Administration
Geography
German
*Health
*History
*Human Ecology General
*Humanities
Journalism
*Language Arts
Latin
*Law Enforcement
Library Science
*Management
*Management Information Systems
*Marketing
*Mathematics
Military Science
*Multimedia Design
*Museum Studies
*Music
*Philosophy
*Physical Educ \& Health
*Physics
Political Science
Professional Writing
Psychology
Public Relations
*Radio/Television
*Recreation
*Recreational Arts
Sociology
Spanish
*Speech Communication
*Statistics
Substance Abuse
*Theatre Arts

* Defined minor


## DEFINED MINORS

## Accounting

Non-Business Majors: ACCT 2013, ACCT 2023 and 12 semester hours of upper division accounting courses.
Business Majors: 18 semester hours of upper division accounting courses

## Art

ART 1113, ART 1213, ART 1223, ART 2243, ART 2623 and 9 hours of upper division electives

## Art History

ART 1013, ART 2613, ART 2623, ART 4633 (9 hours)

## Athletic Coaching

(Closed to Health and Physical Education majors). HLTH 3244, HLTH 3292. HLTH 4503, HPET 4003 and 6 hours chosen from the following: Sports Officiating (2 hours), Theory of Coaching ( $2-4$ hours), Drugs and Society ( 3 hours), Weight Training ( $1-2$ hours), HPET Special Studies ( $1-2$ hours)

## Biology

BIOL 1364, BIOL 1474 and 10 semester hours of upper division biology courses.

## Chemistry

CHEM 1361/1364 and CHEM 1471/1474 and 8 hours selected from CHEM 2113, CHEM 2232, CHEM 3345 OR CHEM 3314 and CHEM 3324 or other approved Chemistry courses.

## Computer Science

CS 1301, CS 1313, CS 1501, CS 1513, CS 1523, CS 2401, CS 2413, CS 2513; and one upper division computer science course that applies towards a computer science degree.

## Corrections

CJ 1013, CJ 1033, CJ 1113; any three CORR courses

## Criminal Justice

CJ 1013, CJ 1033, CJ 1113; three additional courses in CJ, CORR, or LE; at least one of these courses must be a CJ course.

## Driver and Safety Education

(Closed to Health and Physical Education majors with a concentration in Physical Education and Safety) SFTY 3723, SFTY 3823, SFTY 4923 and 9 hours chosen from other Safety Education courses; HLTH 2213 , EDUC 3632 and/or other approved courses, workshops, seminars in traffic or safety education.

## Economics

## Non-Business Majors:

ECON 2013, ECON 2023, ECON 3013, ECON 3023, ECON 3313 and 3 hours of upper division business or economics elective.
Business Administration and Accounting Majors:
ECON 3013, ECON 3023, ECON 3313 and 9 hours of upper division economics and business electives.

## Environmental Studies

HUM 2513 and selected from the following:
GEOL 1024, GEOG 2013, BIOL 2444, GEOG 3253, SOCI 3373, ECON 4213

## Ethnic Studies

HUM 2513 and 15 hours selected from the following: SPAN 1113, SPAN 1223, SOCI 3013, HIST 3333, GEOG 3243, ENGL 2313, ENGL 2323, HIST 3343, HIST 3353

## Family Science

Required: 6 hours - FAMS 1123, FAM S 1163
Electives: 12 hours to be chosen from any course with a FAMS prefix or FNS 3313

## Foreign Languages

Any 18-hour combination of any level course with a foreign language prefix.

## Finance

## Non-Business Majors:

FIN 3603, FIN 3313, FIN 3623, FIN 4333 and 6 hours of upper division finance electives.

Business Administration and Accounting Majors: FIN 3313, FIN 3623, FIN 4333 and 9 hours of upper division finance electives.

## General Business Administration

## Non-Business Majors:

ACCT 2013, ACCT 2023, ECON 2023, FIN 3603, MGMT 3013, MKTG 3413.

## Humanities

HIST 2113 or HIST 2223 and 15 hours selected from the following with no more than 6 hours with the same prefix) ART 2613, ART 2623, ENGL 3063, ENGL 3073, PHIL 1113, HIST 1113, HIST 1123, MUSC 1413, MUSC 1423,THTR 3823, HUM 2513.

## Health

(Closed to Health and Physical Education majors). HLTH 1053, HLTH 2213, HLTH 3244, SFTY 3613, FNS 1343 and 2-8 hours from the following: School and Community Health Programs ( 3 hours), Physiology of Exercise ( 3 hours), Methods of Materials in Health Education ( 3 hours), HPET Special Studies ( $1-2$ hours),
Other approved health or health related courses ( 3 hours)

## History

HIST 1113, HIST 1123, HIST 1483, HIST 1493, and 6 hours of history electives.

## Human Ecology

There are two options for the student who elects a minor in Family Science or General Human Ecology. Detailed information may be obtained from the Department of Psychology and Human Ecology.

## Language Arts

It is recommended that 9 to 12 hours be selected from one of the following areas and that 6 to 9 hours be selected from one or more of the other fields listed, for a total of 18 hours. The language arts areas consist of: Foreign Languages, Journalism, Library Science, English (sophomore level or above) (the English option is closed to English majors), Theatre, Communications (except COMM 1113), Professional Writing.

## Law Enforcement

CJ 1013, CJ 1033, CJ 1113; any three LE courses.

## Management

Non-Business Majors: BUS 1113, ACCT 2013, MGMT 3013, MGMT 3513 and upper division management electives ( 6 hours).
Business Administration and Accounting Majors: ACCT 3213, MGMT 3513, MGMT 3813, MGMT 4023 or MGMT 4033 and upper division management electives (6 hours).

## Management Information Systems

Non-Business Majors: MIS 3013, MIS 3033, MIS 3083, MIS 3223, MIS 4533 and 3 hours of upper division MIS electives.
Business Administration and Accounting Majors: MIS 3033, MIS 3083, MIS 3223, MIS 4533 and 6 hours of upper division MIS electives.

## Marketing

Non-Business Majors:
BUS 1113, MKTG 3413, MKTG 3423, MKTG 4443 and 6 hours of upper division marketing electives.
Business Administration and Accounting Majors:
MKTG 3423, MKTG 4443 and 12 hours of upper division marketing electives.:

## Mathematics

Required: MATH 2215* and MATH 2235 (*Prerequisites: MATH 1513 and MATH 1613) and a minimum of 8 credit hours of electives chosen from the following:
MATH 2244 , MATH 2613 , STAT 3013, MATH $3013^{*}$, MATH $3213^{*}$, MATH 3253 , MATH 3302 , MATH 3333, MATH 4113, MATH 4423* , MATH 4433, MATH 4483**.
(*Prerequisite: MATH 2613. ${ }^{* *}$ Prerequisites: MATH 2244 and MATH 2613)

## Multimedia Design

MM 1013, MM 1133 and 12 hours of MM electives.

## Museum Studies

Prerequisites: HIST 1483 and HIST 1493. Required: MUSM 2003, MUSM 3003, MUSM 4003 (to be repeated for a total of 6 hours), and two of the following: HIST 2133 (recommended), HIST 2113, HIST 3113, HIST 3343, HIST 2033 or HUM 2513.

## Music

Band/Choir/Accomp./Orch. (4 semesters)
MUSC 1413, MUSC 1423, MUSC 2312, MUSC 2332, MUSC 2201 of MUSC 3801 (4 semesters)

## Philosophy

PHIL 1113, PHIL 2213, PHIL 3013, PHIL 3123 and at least two of the following courses:
EDUC 3013, PHIL 4591-3, PS 3613, PS 3623, PS 3633, PS 4673

## Physical Education and Health

FNS 1343, HPET 2322, HPET 4203, HLTH 3292, HLTH 3303, HLTH 4503 and 2-8 hours chosen from Health and Physical Education and/or SFTY 3613. Physical education activity courses will not meet this requirement.

## Physics

PHYS 1115 and PHYS 1215 or PHYS 2015 and PHYS 2025, PHYS 3003 and electives (5 hours).

## Radio/Television

RTV 1013, RTV 2213, RTV 2313 and RTV electives 9 hours.

## Recreation

HPET 2322, HPET 3353, HPET 3363, Aquatic Activity Class (1 hour) and electives 9 hours. Courses chosen from the following: HPET 3373, HPET 4222, HPET 4003, HPET 3052 or 3062, SFTY 3613, HLTH 2213, SFTY 3723, PE Activities (2 hours), HPET special studies (1-2 hours).

## Recreational Arts

To be selected from the following 3 areas with a minimum of 3 hours and no more than 9 hours from any one area for a total of 18 hours.
Art: ART 1113, ART 1023, ART 2313, ART 2513, ART 2813, ART 3833
Music: (Must include MUSC 3683 Music for the Elementary Teacher) MUSC 1111, MUSC 1141, MUSC 1023
Theatre: THTR 1103, THTR 1203, THTR 1603, THTR 2603, THTR 3403

## Speech Communication

COMM 1113, COMM 2313 or COMM 3393 and electives 12 hours.

## Statistics

Required: MATH 2215*, MATH 2235, STAT 3013**.
(*Prerequisite: MATH 1513 and MATH $1613{ }^{* *}$ Prerequisite: MATH 1513 or equivalent)
and a minimum of 5 credit hours of electives chosen from the following:
STAT 3023, STAT 3113 , STAT 3123 , STAT 3202 , MATH 3253 , MATH 3333 , MATH 3302 , MATH 4113 , MATH 4433.

## Theatre Arts

THTR 1103, THTR 1203, THTR 2603 and electives 9 hours.
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SEYMOUR, WANDA SUE, (1974) Business-Management, B.S., M.S., Ed.D., Oklahoma State University. 1993
SHAHAN, BILL G., (1967) Health and Physical Education. B.S., M.T., Central State College. 1986
SHANAHAN, LAWRENCE B., (1972) English, Foreign Languages and Journalism, B.S., M.A., Marquette University; Ph.D., University of Wisconsin. 1999
SHANAHAN, MARY S.,(1972) English, Foreign Languages and Journalism, B.S., M.S., Ph.D., University of Wisconsin. 1999
SHAW, WANDA, (1968) Art, B.S., M.S., Kent State University, 1985
SHEETS, BOBBY, (1980) Undergraduate Coordinator-School of Business, B.S., M.E., Southwestern State University; C.P.A., State of Oklahoma; Ph.D., University of Oklahoma. 1996
SIMPSON, PHILLIP M., (1971) History and Government, B.A., M.A., North Texas State University; Ph.D., University of Arizona. 2005
SIRCY, OTICE C., (1968) English, Foreign Languages and Journalism, B.A., University of Texas; M.A., North Texas State University. 2000
SIRCY, VIRGINIA, (1968) Music, B.M., North Texas State University; M.M., Michigan State University; D.M.A., North Texas State University.
SKRDLE, NANCY, (1969) Serials Librarian, B.S., Oklahoma College for Women; M.L.S., University of Oklahoma. 1993
SMITH, ARTHUR, (1969) Music, B.M., M.M., Cincinnati Conservatory of Music; D.M.E., University of Oklahoma. 1995
SMITH, CHARLES WAYNE, (1970) Chair, History and Humanities, B.S., William Carey College; M.A., Ph.D., University of Southern Mississippi. 2000

SMITH, GEORGE F., (1969) Music, B.M.E., M.M.E., University of Oklahoma; Ed.D., North Texas State University. 1990
SOLSTAD, KENNETH, (1972) English and Foreign Languages, B.A., Yale University; M.A., Ph.D., University of California at Berkeley. 2005
SPEARS, JOHN, (1976) Health and Physical Education, B.S., M.T., Southwestern Oklahoma State University. 1994
SPESSARD, MILTON L., (1964) Library, B.B.A., M.L.S., University of Oklahoma. 2001
SPRADLEY, TERRY P., (1966) Technology, B.A., Oklahoma City, University, M.S., Ed.D., Oklahoma State University. 1987
STANTON, JIMMY H., (1968) Physical Sciences, B.S., Deltà State College; Ph.D., University of Mississippi. 2004
STEVENS, MARION D., (1966) History and Humanities, B.A., Northeastern State College; M.A., Eastern New Mexico State University. 1999
STEVENS, WANDA, (1981) Business, B.A., M.A., Eastern New Mexico University; Ph.D., University of Oklahoma. 1998
SULLIVAN, B. DON, (1992) Vice President for University Advancement, B.S., M.S., Oklahoma State University; Ph.D., University of Missouri-Columbia. 2002
TERRY, TAYLOR BROOKS, (1965) Language Arts, B.A., Southern Methodist University; M.A., University of Texas at El Paso. 1982
TYLER, JACK D., (1967) Biological Sciences, B.S., Southwestern State College; M.S., Oklahoma State University, Ph.D., University of Oklahoma. (2003)

TYSON, LAWANDA, (1971) Education and Psychology, B.S., East Texas Baptist College; M.Ed., Ph.D., East Texas University. 1987
VAN SCHUYVER, BILLYE, (1981) Dean, School of Education and Behavioral Sciences, B.L.S., University of Oklahoma; M.A.T., Oklahoma City University; Ph.D., University of Oklahoma. 1996
WAGNER, HARRY, (1969) Mathematical Sciences, B.S., Naval Postgraduate School; M.S., Kansas State Teachers College; Ed.D., University of Arkansas. 1990
WILLIAMS, WARD, (1968) Education and Psychology, B.S., M.Ed., University of Oklahoma. 1985
WILSON, VICKI, (1972) Health and Physical Education, B.S., San Francisco State; M.S., University of Oklahoma. 1999
WYNN, VALREE F. (1966) English, B.A., Langston University, M.A., Ph.D., Oklahoma State University. 1985
ZIEGLER, ROBERT, (1968) Biological Sciences, B.S., M.S., Fort Hays State College. 2003
Academic Advisors ..... 25
Academic Calendars ..... 2
Academic Information Technology Center ..... 30
Academic Forgiveness ..... 25
Academic Load ..... 21
Academic Notice ..... 24
Academic Probation ..... 24
Academic Regulations ..... 20
Academic Support Services ..... 29
Academic Suspension ..... 24
Academic Suspension Appeal and Readmission ..... 24
Accounting Courses ..... 40
Accounting Degree ..... 40
Accreditation ..... 4
Activities, Student ..... 31
Adding Courses ..... 22
Administration and Faculty Listing ..... 219
Administration, Officers of ..... 218
Admissions ..... 15, 16
English as a Second Language ..... 16
High School Seniors ..... 16
Junior College Graduates ..... 17
Requirements ..... 15
Admissions Residence Status ..... 18
Independent Persons ..... 18
Dependent Persons ..... 19
Foreign Nationals ..... 19
Military Personnel ..... 19
Proof of Residence ..... 19
Reclassification ..... 19
Adult Admission ..... 15
Adult Degree Completion ..... 207
Advanced Standing Credit ..... 25
Advisement Courses ..... 213
Advisors ..... 25
Agricultural Mechanics Courses ..... 148
Agriculture Courses ..... 147
Agriculture Degree ..... 146
Agriculture Department ..... 146
Agronomy Courses ..... 149
Aid to Students ..... 12
Albanian Course ..... 110
Alternative Admission ..... 15
Alumni ..... 36
Animal Science Courses ..... 150
Anthropology Courses ..... 94
Appeal of Final Grade ..... 26
Applied Science Associate Degrees ..... 7
Applied Technology A.A.S. Degree ..... 165
Arabic Courses ..... 110
Architecture Courses ..... 168
Architecture and Engineering Pre- Professional Programs ..... 167
INDEX
Army R.O.T.C. Scholarships ..... 13
Art Courses ..... 81
Art Degree ..... 80
Art Department ..... 80
Assessment, Outcomes ..... 2
Associate Degree Programs ..... 7, 11
Associate Degree Summary ..... 38
Astronomy Courses ..... 200
Athletics ..... 32
Attendance, Class ..... 22
Auditing Regulations ..... 22
Baccalaureate Degree Programs ..... 5, 11
Baptist Collegiate Ministry ..... 32
Baseball Park ..... 31
Biological Sciences Department ..... 153
Biology Courses ..... 155
Biology Degree ..... 153
Biology Education Degree ..... 154
Boards of Regents ..... 218
Bookstore ..... 35
Business Administration Degree ..... 42
Business Courses ..... 44
Business Degree, A.S ..... 43
Business Tutorial Laboratory ..... 30
Business School ..... 39
Calendar, Academic ..... 2
Cameron Campus Ministry ..... 32
Cameron Stadium ..... 31
Cameron University Alumni
Association ..... 36
Career Services ..... 28
Catalan Course ..... 110
Center for Writers ..... 29
Changing Course Schedules ..... 22
Chemistry Courses ..... 200
Chemistry Degree ..... 196
Chemistry Education Degree ..... 197
Chinese Courses ..... 110
Church of Christ Bible Chair ..... 32
Class Size, Minimum ..... 25
Classification of Students ..... 21
CLEP Test ..... 28
Clubs and Organization ..... 32
College Level Examination
Program (CLEP) ..... 28
Collegian, Newspaper ..... 33
Comanche Language Courses ..... 110
Communications Courses ..... 86
Communications Degree ..... 85
Communication Department ..... 85
Computer Aided Design Drafting, A.A.S. Degree ..... 165
Computer Aided Design Drafting Courses ..... 168
Computer Information Systems Courses ..... 169
Computer Literacy ..... 38
Computer Science Courses ..... 170
Computer Science Degree ..... 161
Computing and Technology Department ..... 161
Concurrent Enrollment at Another Institution ..... 20
Concurrent Enrollment of High School Students ..... 16
Conduct, Student ..... 34
Consumer Resource Management Courses ..... 74
Contents ..... 3
Corrections Courses ..... 94
Correspondence Credit ..... 21
Counseling Services ..... 28, 29
Course Loads ..... 21
Course Numbering System ..... 22
Courses, Repeating ..... 24
Credit Hours ..... 22
Credits by Examination ..... 28
Criminal Justice and Sociology Department ..... 92
Criminal Justice A.A.S. Degree ..... 93
Criminal Justice Courses ..... 95
Criminal Justice B.S. Degree ..... 92
Cultural Programs ..... 32
Curricula Offered ..... 5
Czech Course ..... 111
Danish Course ..... 111
Davis Memorial Student Union ..... 35
Dean's List ..... 26
Dari Courses ..... 111
Debate Team ..... 32
Defined Minors ..... 213
Degree Application ..... 21
Degree Programs ..... 5
Accounting ..... 40
Agriculture ..... 146
Applied Technology ..... 165
Art ..... 80
Business ..... 43
Biology ..... 153
Biology Education ..... 154
Business Administration ..... 42
Chemistry ..... 196
Chemistry Education ..... 197
Computer Aided Design Drafting ..... 165
Communications ..... 85
Computer Science ..... 161 ..... Criminal Justice
Early Childhood Certification ..... 54
Early Childhood Education
B.S. Degree ..... 54
Early Childhood Education and Care
A.A.S. Degree ..... 55
Early Childhood Education and Care Courses ..... 55
Early Childhood Education Courses ..... 56
Earth Science Course ..... 151
Economics Courses ..... 45
Education and Behavioral Sciences School ..... 50
Education Courses ..... 57
Education Department ..... 51
Educational Outreach ..... 206
Electronic Engineering Technology B.S. Degree ..... 162
A.A.S. Degree ..... 166
Electronic Engineering Technology Courses ..... 173
Elementary Education Degree ..... 53
Elementary Teacher Certification (see Teacher Education) ..... 51, 52
Employment, Student ..... 14
Engineering Pre-Professional Programs ..... 167
Engineering Design Technology B.S. Degree ..... 163
Engineering Design Technology Courses ..... 174
English as a Second Language Courses ..... 111
English Courses ..... 103
English Degree ..... 101
English Education Degree ..... 102
English \& Foreign Languages Department ..... 101
Enrollment Procedures ..... 22
Environmental Science Course ..... 151
Equal Opportunity Office ..... 4
E.S.L ..... 111
Extra-Curricular Activities ..... 31
Faculty Listing ..... 219
Faculty-Emeritus ..... 227
Falsification of Records ..... 18
Family Science Courses ..... 74
Fees ..... 12
Final Grade, Appeal of ..... 26
Finance Courses ..... 46
Financial Assistance Office ..... 12, 27
Financial Information ..... 12
Fine Arts Courses ..... 141
Fine Arts Computer Laboratory ..... 29
Food and Nutrition Courses ..... 75
Food Services ..... 35
Foreign Language Courses
Albanian ..... 110
Arabic ..... 110
Catalan ..... 110
Chinese ..... 110
Czech ..... 111
Danish ..... 111
Dari ..... 111
Dutch ..... 111
French ..... 112
German ..... 113
Indonesian ..... 113
Italian ..... 113
Latin ..... 114
Norwegian ..... 115
Pashto ..... 115
Persian (Farsi) ..... 115
Polish ..... 115
Portuguese ..... 115
Romanian ..... 115
Russian ..... 116
Somali ..... 116
Spanish ..... 116
Swahili ..... 117
Swedish ..... 118
Turkish ..... 118
Foreign Languages (See Department of English \& Foreign Languages) ..... 101
Foreign Language/ESL
Learning Center ..... 29
Forgiven Course ..... 25
French Courses ..... 112
Functions of the University ..... 11
Full-Time Student ..... 18, 21
General Education Program (see Interdisciplinary Studies) ..... 207
General Education
Requirements ..... 37
General Information ..... 9
Geography Courses ..... 122
Geology Courses ..... 203
German Courses ..... 113
Grades ..... 23
Grades, After Withdrawal ..... 23
Grades, Changing ..... 23
Grade Point Calculation ..... 20
Grade Points ..... 23
Grading System ..... 23
Graduate Degree Programs ..... , 11
Graduation Application ..... 21
Graduation RequirementsAssociate20
Baccalaureate ..... 20
Graduation with Honors ..... 21
Grants ..... 14
Guaranteed Student Loan Program ..... 14
Guidance Services ..... 28
Gymnasium ..... 31
Health Courses ..... 66
Health and Physical Education Department ..... 64
Health and Physical Education Degree ..... 64
Health and Physical Education Theory Courses ..... 67
Health/Insurance Services ..... 36
High School/University Relations ..... 27
History and Government Department ..... 119
History Courses ..... 123
History Degree ..... 119
History of Cameron ..... 9
Honor Graduates ..... 21
Honor Societies ..... 31
Honors Courses ..... 25
Honors Program ..... 9
Horticulture Courses ..... 151
Housing ..... 27
Human Ecology Degree ..... 73
Humanities Courses ..... 128
Incomplete, Grade of ..... 23
Indonesian Courses ..... 113
Information Assurance/Security Courses ..... 175
Information Technology
B.S. Degree ..... 163
A.A.S. Degree ..... 167
Information Technology Courses ..... 176
Institutional Purposes ..... 10
Insurance for Students ..... 36
Intercollegiate Athletics ..... 32
Intercollegiate Sports Courses ..... 71
Interdisciplinary Studies B.S. and A.A.S Degrees ..... 207
International Languages Degree ..... 108
International Student Services ..... 16
Intramurals ..... 32
Italian Courses ..... 113
Journalism Courses ..... 88
Junior College Graduates ..... 17
Junior College Work ..... 17
Laboratories ..... 29
Language Learning Center ..... 29
Late Enrollment ..... 22
Latin Courses ..... 114
Law Enforcement Courses ..... 97
Lecture and Concerts
Committee ..... 32
Liberal Arts and Sciences Component ..... 20
Liberal Arts School ..... 79
Library ..... 30
Library Science Courses ..... 61
Linguistics Courses ..... 114
Loans ..... 14
Majors Offered ..... 5
Major Requirements ..... 20
Management Courses ..... 47
Management Information Systems Courses ..... 177
Marketing Courses ..... 48
Mathematics Courses ..... 183
Mathematics Degree ..... 181
Mathematics Education Degree ..... 182
Mathematical Sciences Department ..... 181
Mathematics Tutorial Laboratory ..... 29
McCord Field ..... 31
McNair Scholars Program ..... 28
Medical Technology Courses ..... 159
Medical Technology Degree ..... 155
Military Science and Leadership Courses ..... 188
Military Science Department ..... 187
Minor, Program Summary ..... 213
Mission of Cameron ..... 10
Multicultural Services ..... 27
Museum Courses ..... 128
Multimedia Courses ..... 193
Multimedia Design A.A.S. Degree ..... 192
Multimedia Design B.S. Degree ..... 192
Multimedia Design Department ..... 192
Music Courses ..... 134
Music B.A. Degree ..... 133
Music B.M. Degree ..... 133
Music Department ..... 133
Name Change ..... 18
Native American Scholarships ..... 13
Natural Science Degree ..... 198
Newspaper, The University ..... 33
Non-Degree Programs ..... 8
Non-Degree Seeking Student ..... 15
Non-Resident Student ..... 18
Norwegian Course ..... 115
Nursing Degree, A.A.S., Western Oklahoma State College ..... 208
Nursing Degree, A.S. University of Oklahoma College of Nursing ..... 208
Officers and Faculty ..... 218, 219
Oklahoma Review ..... 33
On-Campus Housing ..... 27
Open Doors ..... 29
Organizational Leadership Courses ..... 210
Organizational Leadership Degree ..... 209
Orientation ..... 27
Outcomes Assessment ..... 2
Ownership of Records ..... 18
Pashto ..... 115
Persian (Farsi) Courses ..... 115
Personal Counseling ..... 28
Phi Kappa Phi ..... 31
Philosophy Courses ..... 129
Physical Education Activity Courses ..... 68
Physical Education Degree ..... 65
Physical Sciences Courses ..... 204
Physical Sciences Department ..... 196
Physics Courses ..... 203
Physics Degree ..... 199
Placement Tests ..... 17
PLUS ..... 13
Polish Course ..... 115
Political Science Courses ..... 129
Political Science Degree ..... 120
Portuguese Courses ..... 115
Post Office ..... 35
Pre-Baccalaureate Nursing, A.S.
Degree (Interdisciplinary Studies) ..... 208
Pre-Law ..... 92
Pre-Professional ..... 8, 167
Prerequisites ..... 22
Presence at Commencement ..... 21
Presidential Leaders/University Scholars ..... 13
President's List ..... 26
Private Organization Scholarships ..... 13
Probation, Academic ..... 24
Professional Writing Courses ..... 107
Programming Activities Council (PAC) ..... 31
Programs and Services ..... 27
Proof of Residency ..... 19
Psychology and Human Ecology Department ..... 73
Psychology Courses ..... 77
Psychology Degree ..... 76
Public Relations Courses ..... 89
Publications ..... 33
Radio and Television Courses ..... 89
Reading Center ..... 29
Re-Admission After Suspension ..... 24
Reclassification ..... 19
Recruiting and High School/University Relations ..... 27
Regents ..... 218
Regulations, Academic ..... 20
Rehabilitation Scholarships ..... 13
Religious Education Courses ..... 104
Religious Organizations ..... 32
Remedial/Developmental Courses ..... 26
Renewed Courses ..... 25
Repeating Courses ..... 24
Reprieved Courses ..... 25
Research ..... 30
Residence Halls ..... 27
Residence Policy ..... 18
Resident Status ..... 18
Respiratory Care A.A.S. Degree ..... 209
Retention Standards ..... 24
Romance Languages Education Degree ..... 109
Romanian Courses ..... 115
R.O.T.C. ..... 187
R.O.T.C. Scholarship Program ..... 13
Russian Courses ..... 116
Safety Courses ..... 71
Satisfactory Grade ..... 23
Schedule, Changes of ..... 22
Scholarships ..... 12
Scholastic Probation ..... 24
Scholastic Requirement ..... 24
Science and Technology School ..... 144
Second Associate Degree ..... 21
Second Baccalaureate Degree ..... 21
Secondary Teacher Certification ..... 52
Servicemembers' Opportunity College ..... 12
Services and Programs ..... 27
Social Studies Education Degree ..... 121
Sociology Courses ..... 97
Sociology Degree ..... 93
Somali Courses ..... 116
Southwest AHEC ..... 206
Spanish Courses ..... 116
Special Education Courses ..... 62
Special Needs Students ..... 27
Special Students ..... 15
Specialty Degrees ..... 8
Speech (Communications) Courses ..... 86
Statistics Courses ..... 185
Student Activities ..... 31
Student Activities Facilities ..... 31
Student Conduct ..... 34
Student Congress ..... 31
Student Employment ..... 14
Student Government ..... 32
Student Policies Handbook ..... 34
Student Life ..... 31
Student Publications ..... 33
Student Organizations ..... 32
Student Records Access ..... 34
Student Services and Programs ..... 27
Student Support Services ..... 28
Student Union ..... 35
Studio Art Degree ..... 80
Substitution of Courses ..... 25
Support Services Division ..... 206
Suspension, Academic ..... 24
Suspension of Seniors ..... 24
Swahili Courses ..... 117
Swedish Course ..... 118
Teacher Education Admission ..... 52
Teacher Education ..... 11,51
Teacher Licensing and Certification ..... 51
Technology Courses ..... 178
Technology B.S. Degree ..... 164
Test of English as a Foreign Language ..... 16
Testing Services ..... 28
Theatre Arts Department ..... 140
Theatre Arts Courses ..... 141
Theatre Degree ..... 140
T.O.E.F.L. ..... 16
Transcripts ..... 25
Transfer Admission ..... 17
TRIO Program ..... 28
Turkish Courses ..... 118
Tutorial Laboratories ..... 30
Undergraduate Degrees ..... 5
Undergraduate Associate Degrees ..... 7
Undergraduate Speciality Degrees ..... 7
University, Courses ..... 209
University Functions ..... 11
University Interdisciplinary Degrees ..... 207
University Testing Center ..... 28
Upward Bound ..... 29
Veterans, Benefits ..... 14
Vocational Courses ..... 179
Vocational Rehabilitation ..... 13
Waiver of Courses ..... 25
Who We Are ..... 10
Who's Who ..... 33
Withdrawal ..... 22
Work-Study Program ..... 14
Writing Center ..... 29



[^0]:    * Liberal arts and sciences course.

    GR May be taken for graduate credit.

[^1]:    * Liberal arts and sciences course

[^2]:    * Liberal arts and sciences course

[^3]:    - Liberal arts and sciences course

[^4]:    * Liberal arts and sciences course.

[^5]:    * Liberal arts and sciences course

[^6]:    III. MINOR

    Students desiring to enter the job market in such areas as technical writing, editing, public relations, and the like are urged to consider a minor in journalism or (except for those choosing the Creative Writing emphasis) in Professional Writing.

[^7]:    * Liberal arts and sciences course.

[^8]:    - Liberal arts and sciences course.

[^9]:    I. GENERAL EDUCATION REQUIREMENT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50 hours General Education requirements are found on the red striped pages.
    II. MAJOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Minimum of 40 hours

    Required Courses . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 33 hours
    CS 1301, CS 1313, CS 1501, CS 1513, CS 1523, CS 2401, CS 2413,
    CS 2513, CS 3013, CS 3513, CS 3713, CS 3813, CS 4203
    Seminars . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 hours
    CS 2001-3*, CS 3001-3, CS 3100, CS 4001-3, CS 3183
    *No more than 2 hours at the 2000 level.

[^10]:    * Liberal arts and sciences course

[^11]:    * Liberal arts and sciences course.

[^12]:    I. GENERAL EDUCATION REQUIREMENT 50 hoursGeneral Education requirements are found on the red striped pages.

