CAMERON UNIVERSITY
UNDERGRADUATE
CATALOG
2025-2027
CAMERON
UNIVERSITY
AGGIES
AGGIES
BASKETBALL

CAMERON UNIVERSITY

UNDERGRADUATE CATALOG 2025–2027

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Cameron University, in compliance with all applicable federal and state laws and regulations, does not discriminate on the basis of race, color, national origin, sex, sexual orientation, genetic information, gender identity/expression (consistent with applicable law), age (40 or older), religion, political beliefs, disability, or status as a veteran in any of its policies, practices or procedures. This includes, but is not limited to, admissions, employment, housing, financial aid, and education services. Inquiries regarding non-discrimination policies may be directed to Cameron University Equal Opportunity Officer and Title IX Coordinator, 580-581-6712, eo-tix@cameron.edu. This publication is issued by Cameron University as authorized by the Vice President for Academic Affairs in the Office of Academic Affairs. Copies have not been printed but are available through the agency website. (07/2025)

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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. 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 at the University. This catalog should not be construed as a contract between Cameron and any person. The online Undergraduate Catalog reflects the most recent changes to requirements, curricula, and courses.

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. Consequently, students should consult the appropriate advisor and refer to the class schedule for the offerings in any given academic session.

ACADEMIC CALENDAR

Cameron University's academic calendar is approved by the President or their designee and submitted annually to the Oklahoma State Regents for Higher Education (OSRHE). 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 traditional academic calendar for institutions in The Oklahoma State System of Higher Education consists of the fall, spring, and summer terms defined as follows:

A. The summer session begins late May or early June and ends late July or early August.
B. The fall semester begins mid- to late August or early September and ends in December.
C. The spring semester begins 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 Academic Calendar is distributed to all departments and is available online.

OUTCOMES ASSESSMENT

Cameron University's comprehensive outcomes assessment program, mandated by OSRHE, consists of entry-level assessment, general education assessment, program outcomes assessment, co-curricular assessment, student satisfaction assessment, and student engagement assessment. Participation by students may be required as a condition of enrollment, continued enrollment, or graduation. Current outcomes for academic programs and non-instructional units may be found on the Student Learning Outcome statements webpage.

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GENERAL INFORMATION

HISTORY

The evolution of Cameron University closely parallels the history of the area it serves in Southwest Oklahoma. It was founded by the Oklahoma Legislature in 1908 as the 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, the 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 Cameron joined a 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 1970, the first bachelor's 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 Oklahoma State Regents for Higher Education expanded Cameron's functions to include offerings at the master's degree level. This change in function was the first granted to an Oklahoma institution since Cameron was given authority to offer bachelor's degrees more than 20 years earlier. The first master's degrees were awarded in May 1990.

In recognition that Cameron's mission had become significantly more complex and predominantly urban, in June 1992, governance of the university was transferred by the Oklahoma Legislature to The Board of Regents of The University of Oklahoma. 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 as well as undergraduate and graduate certificates.

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.

CORE VALUES

Cameron University values:

- Student learning as our top priority;
- Excellence in teaching, scholarship, service, and mentoring:
  - Investment in people: The growth and development of our students, faculty and staff in a learning environment based on integrity, respect, and ethical behavior that encourages and provides opportunities for professional improvement;
- Leadership in our community and region that emphasizes:
  - Stimulating economic development,
  - Forming partnerships and collaborative relationships,
  - Providing cultural and social development, and
  - Serving the community and region by sharing our expertise;
- Shared governance that includes:
  - Emphasizing teamwork,
  - Facilitating open and effective communication, and
  - Providing opportunities for active participation by all constituencies;
- Diversity among our students, faculty, and staff as demonstrated by:
  - Providing access to educational and teaching opportunities for all constituents, and
  - Promoting tolerance through a free and open exchange of ideas;
- Responsible stewardship of public and private resources, the public trust, and Cameron's future that includes:
  - Focusing resources to achieve optimal student learning,
  - Increasing student access to quality higher education,
  - Establishing a reliable stream of public and private revenue,
  - Holding administrative costs to a minimum,
  - Enhancing alumni involvement, and
  - Providing accountability in key areas such as student learning and management of resources.

UNIVERSITY FUNCTIONS

The functions assigned to Cameron University by the Oklahoma State Regents for Higher Education include:

A. Participating in programs of economic and community development independently or in cooperation with public and private entities,
B. Providing general education for all students,
C. Providing micro-credentials, certificates, and

degrees to prepare individuals to enter the labor market,

D. Responsibility for institutional and applied research in those areas related closely to their programs of study and effectiveness of operation,
E. Responsibility for public service in the geographic regions in which they are located,
F. Providing formal and informal programs designed to serve Oklahomans with continuing education and professional enhancement opportunities,
G. Providing developmental education for students who lack required high school academic requirements for college admission or competency in the basic academic skills areas, and
H. Performing other special programmatic activities as authorized by the State Regents.

Additionally, as a regional institution, Cameron University is assigned the functions of

A. Both lower- and upper-division undergraduate study fields leading to the baccalaureate degree, and
B. Programs leading toward the first-professional master's and doctoral degrees when appropriate to the institution's strengths and the needs of the state.

CU is also approved to offer associate-level degree programs.

ACCREDITATION

Cameron University is accredited by The Higher Learning Commission (HLC).

Some of Cameron's academic programs are accredited through discipline-specific accrediting programs. A list of accredited programs and information regarding their respective accrediting bodies is maintained on the Accreditation webpage.

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.

Cameron University, in compliance with all applicable federal and state laws and regulations, does not discriminate on the basis of race, color, national origin, sex, sexual orientation, genetic information, gender identity/expression (consistent with applicable law), age (40 or older), religion, political beliefs, disability, or status as a veteran in any of its policies, practices or procedures. This includes, but is not limited to, admissions, employment, housing, financial aid, and education services. Inquiries regarding non-discrimination policies may be directed to: Cameron University Equal Opportunity Officer and Title IX Coordinator, 580-581-6712, eo-tix@cameron.edu.

DEGREES, CERTIFICATES, AND MAJORS

Cameron University offers curricula leading to master's, bachelor's, associate degrees, and graduate and undergraduate certificates. The following undergraduate degrees are offered: Associate in Arts (AA), Associate in Science (AS), Associate in Applied Science (AAS), Bachelor of Accounting (BACC), Bachelor of Arts (BA), Bachelor of Business Administration (BBA), Bachelor of Fine Arts (BFA), Bachelor of Music (BM), Bachelor of Music Education (BME), and Bachelor of Science (BS). Associate and baccalaureate programs include general education requirements and a major or option. Baccalaureate programs may also include a minor (or major-minor) and electives. Development of expertise in a discipline occurs in major courses while 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 or certificate requirements. It is essential that each student (1) become familiar with the requirements for the degree or certificate being pursued, (2) formally request course substitutions or waivers necessary to meet degree or certificate requirements, (3) verify each enrollment to ensure courses apply toward degree or certificate requirements, satisfy a prerequisite, or meet a mandated institutional requirement, and (4) review their Degree Works audit for accuracy each semester.

Accounting (BACC)
Agriculture (BS) with options in:
- *Agribusiness Management*
- *Agronomy*
- *Animal Science*
- *General Agriculture*

Allied Health Sciences (AS)
Art (BA)
Art (BFA) with options in:
- *Graphic Design*
- *Painting*
- *Printmaking*
- *Sculpture*

Biology (BS) with options in**:**
- *Cellular and Molecular Biology*
- *Medical Laboratory Science*
- *Organismal Biology*

Business (AS)
Business Administration (BBA) with options in:
- *General Business Administration*
- *Finance*
- *Marketing*
- *Management*
- *Embedded Certificate in Banking and Finance (in BBA)*

Chemistry (BS) with options in:
- *ACS Certified Chemistry Degree Major-Minor*
- *Non-ACS Certified Chemistry with Chosen Minor*
- *Health Profession Chemistry Degree Major-Minor*

Computer Science (BS)
Criminal Justice (AS and BS)
- *Embedded Certificate in Criminal Justice Essentials (in AS)*

Early Childhood Education (BS) with option in:
- *Special Education*

Elementary Education (BS) with option in:
- *Special Education*

Engineering (AAS) with options in:
- *Civil Engineering*
- *Electrical Engineering*
- *Environmental Engineering*
- *Industrial Engineering*
- *Mechanical Engineering*

English (BA)
English Education (BA)
Family and Child Studies (BS) with options in:
- *Child Development*
- *Family Studies*
- *Embedded Certificate in Early Childhood Administration (in BS)*

History (BA)
Information Technology (AAS & BS) with BS options in:
- *Cyber Security and Information Assurance*
- *Management Information Systems*
- *Technology*
- *Embedded Certificate in Cyber Security (BS)*

Interdisciplinary Studies (AS & BS)
International Languages (BA)
Journalism & Media Production (BA)
Mathematics (BA)
Music (BA & BM) with BM options in:
- *Composition*
- *Instrumental Performance*
- *Piano Performance*
- *Vocal Performance*

Music Education (BME) with options in:
- *Instrumental/General*
- *Vocal/General*

Organizational Leadership (BS) with options in:
- *Business*
- *Criminal Justice*
- *Military Science*
- *Sociology*
- *Sports and Exercise Science*
- *Technology*

Political Science (BA)
Psychology (BS)
Radiologic Technology (AAS)
Respiratory Care (AAS)
Social Studies Education (BA)
Sociology (BS) with options in:
- *General Sociology*
- *Human Services*

Sports and Exercise Science (BS)
- *Embedded Certificate in Coaching and Teaching (in BS)*

Strategic Communication (AA & BA) with BA options in:
- *Communication Studies*
- *Public Relations*

Theatre (BA) with options in:
- *Performance Theatre*
- *Technical Theatre*
- *Embedded Certificate in Acting (in BS)*
- *Embedded Certificate in Technical Theatre (in BS)*

MINORS

A minor for baccalaureate 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 that offers the courses. Minors that include courses from multiple departments are approved by the dean of the school that offers the majority of the program. Transfer students may use credits earned at other institutions to fulfill minor requirements.

APPROVED MINOR PROGRAMS

Accounting*
Agriculture
Agronomy
Animal Science
Arabic
Art*
Art History*
Biology*
Chemistry*
Communication Studies*
Mathematics*
Computer Science*
Criminal Justice*
Cyber Security*
Economics*
Educational Studies*
English
Environmental Studies*
Family Science*
Finance*
Foreign Languages*
French
General Business Administration*
German
Health*
History*
Humanities*
Information Technology*
Journalism and Media Production*
Language Arts*
Latin
Management*
Management Information Systems*
Marketing*
Military Science*
Multicultural Studies*
Music*
Organizational Leadership*
Physics*
Political Science
Pre-Law*
Professional Writing
Psychology
Public Relations*
Social Sciences*
Sociology*
Spanish
Special Education*
Statistics*
Theatre Arts

**Defined Minor*

DEFINED MINORS

Accounting (18 hours)

***Non-Business Majors*:** ACCT 2013, ACCT 2023, and upper division accounting courses (12 hours); ***Business Majors*:** Upper division accounting courses (18 hours).

Art (24 hours)

ART 1113, ART 1213, ART 1223, ART 2243, ART 2623, and upper division ART electives (9 hours).

Art History (18 hours)

ART 1013, ART 2613, ART 2623, and ART 4633, 4643, 4653.

Biology (24 hours)

BIOL 1364, BIOL 1474, BIOL 2124, BIOL 2144, BIOL 2154, and BIOL 3014.

Chemistry (18 hours)

CHEM 1361/1364, CHEM 1471/1474, and 8 hours selected from CHEM 3113, CHEM 3232, CHEM 3314, CHEM 3324, or other approved Chemistry courses.

Communication Studies (18 hours)

COMM 1113, COMM 2313 **or** COMM 3353, COMM 2393, **and** COMM electives (9 hours).

Computer Science (20 hours)

Required: CS 1314, CS 1514, CS 2513, CS 3183; **and** two courses selected from: CS 1523, IT 1733, CS 2413, CS 3013*, CS 3513*, IT 1063. (*Prerequisite: CS 2413.)

Criminal Justice (18 hours)

CJ 1013, CJ 2113, CJ 3103; **and** three additional courses (9 hours) in CJ.

Cyber Security (19 hours)

19 hours of courses from the Information Technology Program, including IT 1063, IT 2064, IAS 2233, and at least 9 hours chosen from the following courses in the Cyber Security and Information Assurance Option: IAS 2333, IAS 3063, IAS 3233, IAS 3263, IAS 4063.

Economics (18 hours)

Non-Business Majors: ECON 2013, ECON 2023, ECON 3013, ECON 3023, ECON 3313, and upper division business or economics electives (3 hours); ***Business Administration and Accounting Majors***: ECON 3013, ECON 3023, ECON 3313, and upper division business and economics electives (9 hours).

Educational Studies (18 hours)

(*Closed to History, Political Science, English, and Music Majors*). EDUC 3003, EDUC 3733, EDUC 4893, SPED 3103; **and** 6 hours selected from the following: EDUC 3013, EDUC 3673, EDUC 3753, or EDUC 4653.

Environmental Studies (18 hours)

***Non-Biology Majors*:** ENSC 2004, BIOL 1004, and a minimum of 10 hours from: BIOL 1114, GEOG 1014, GEOG 3023, or SOCI 3373; ***Biology Majors*:** ENSC 2004 and a minimum of 14 hours from: BIOL 1114, BIOL 3054[1], BIOL 3074[1], BIOL 4064[1], GEOG 1014, and GEOG 3023. ([1]These courses have prerequisites covered by Biology Major core and/or option requirements).

Family Science (18 hours)

FAMS 1123 and 15 hours to be chosen from any course with a FAMS prefix, ECON 2003, PSY 3353, PSY 3363, or PSY 3373.

Finance (18 hours)

***For Business Administration and Accounting Majors*:** FIN 3313, FIN 3623, FIN 4333, and upper division finance electives (9 hours); ***For Non-Business Majors*:** ECON 2023, FIN 3313, FIN 3603, FIN 3623, FIN 4333, and upper division finance electives (3 hours).

Foreign Languages (18 hours)

Any 18-hour combination of any level course with a foreign language prefix.

General Business Administration (18 hours)

Non-Business Majors: ACCT 2013, ACCT 2023, ECON 2023, FIN 3603, MGMT 3013, MKTG 3413.

Health (18 hours)

(Closed to Sports and Exercise Science Majors) 18 hours selected from SES 2003, SES 2013, SES 2023, SES 2033, SES 3003, SES 3013, SES 3023, SES 3053, SES 4033.

History (18 hours)

HIST 1113, HIST 1123, HIST 1483, HIST 1493, and history electives (6 hours).

Humanities (18 hours)

HIST 2113 **or** HIST 2223 **and** 15 hours selected from (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 1023, MUSC 1033, THTR 3823.

Information Technology (18 hours)

18 semester hours of the Information Technology Program (including IT 2064 and IAS 2233). Note that IT 1013 will not count toward this minor.

Journalism and Media Production (18 hours)

JRMP 1113, JRMP 1213, JRMP 1313, JRMP 2513, and 6 hours of courses with the JRMP prefix.

Language Arts (18 hours)

English Majors: 18 hours in Foreign Languages, Journalism and Media Production, Library Science, Theatre, Communication (except COMM 1113), or Professional Writing. ***Non-English majors:*** 18 hours in Foreign Languages, Journalism and Media Production, Library Science, English (sophomore level or above), Theatre, Communication (except COMM 1113), or Professional Writing.

Management (18 hours)

***Business Administration and Accounting Majors*:** MGMT 3513, MGMT 3813, MGMT 4033, and upper division management electives (9 hours); ***Non-Business Majors*:** BUS 1113, ACCT 2013, MGMT 3013, MGMT 3513, and upper division management electives (6 hours).

Management Information Systems (18 hours)

18 semester hours of the Management Information Systems Specialization courses including MIS 3033 and MIS 4033. Appropriate classes in CS, IAS, or IT may be used to meet the requirements of the MIS minor. IT 1013 may not count toward this minor.

Marketing (18 hours)

Business Administration and Accounting Majors*:** MKTG 3423, MKTG 4443, and upper division marketing electives (12 hours); ***Non-Business Majors: BUS 1113, MKTG 3413, MKTG 3423, MKTG 4443, and upper division marketing electives (6 hours).

Mathematics (18 hours)

MATH 2215[1], MATH 2235, **and** a minimum of 8 credit hours of electives chosen from: MATH 2244, MATH 2613, MATH 3001, STAT 2013 **or** STAT 3113, MATH 3013[2] **or** MATH 4433, MATH 3213[2], MATH 3253, MATH 3302, MATH 3333, MATH 3343, MATH 3413, MATH 4113, MATH 4423[2], MATH 4471-3, MATH 4483[3]. ([1]Prerequisites: MATH 1513 and MATH 1613 or satisfactory placement score. [2]Prerequisite: MATH 2613. [3]Prerequisites: MATH 2235 and MATH 2613).

Military Science (19 hours)

MSL 3013, MSL 3011, MSL 3023, MSL 3021, MSL 4013, MSL 4011, MSL 4023, MSL 4021, HIST 3133.

Multicultural Studies (18 hours)

18 hours chosen from the following: COMM 4313, ENGL 2313, ENGL 2323, FNAR 1013, GEOG 2243, GEOG 3213, MUSC 1033, PHIL 2713, or SOCI 3013.

Music (18 hours)

Four semesters of Concert Band (MUSC 1110-1), Concert Choir (MUSC 1140-1), Accompanying (MUSC 3171), Orchestra (MUSC 1120-1), or Guitar Ensemble (MUSC 1150-1); MUSC 1023, MUSC 1033, MUSC 2312, MUSC 2332, MUSC 3801 (4 semesters), and MUSC 1000 (4 semesters).

Organizational Leadership (18 hours)

A minimum of 18 hours chosen from the following*: ORGL 3223, ORGL 3333, ORGL 3443, ORGL 4113, ORGL 4223, ORGL 4333, ORGL 4443. (*Exception: Students previously admitted to the Organizational Leadership program who have taken ORGL 3113 may count that course towards the 18-hour minor requirement).

Physics (18 hours)

(PHYS 1115 **and** PHYS 1215) **or** (PHYS 2015 **and** PHYS 2025), PHYS 3003, **and** electives (5 hours).

Pre-Law (18 hours)

Required (12 hours): PS 3813, PS 4253, BUS 3213[1], COMM 2213. *Electives (6 hours)*: BUS 3223[2], CJ 2113[3], CJ 2233[3], CJ 3063[4], COMM 3113, COMM 3633. ([1]Prerequisites: Junior Standing; [2]Prerequisite: BUS 3213; [3]Prerequisite: CJ 1013; [4]Prerequisites: CJ 1013 and CJ 2113.)

Public Relations (18 hours)

COMM 4673, PBRL 2113, PBRL 4823, **and** PBRL or JRMP electives (9 hours).

Social Sciences (18 hours)

Required: CJ 1013 and SOCI 1113 **and** 12 hours chosen from any course with a CJ, HIST, GEOG, PS, SOCI, or PHIL prefix.

Sociology (18 hours)

SOCI 1113 and SOCI electives (15 hours).

Special Education (18 hours)

(Open to Psychology and Family and Child Studies majors only.) SPED 3103[1], SPED 3203, SPED 3223, SPED 3243, SPED 3263, SPED 4413. ([1]Prerequisite: EDUC 3733 or PSY 3353). ***This minor does not prepare students for state teaching licensure in public schools.***

Statistics (18 hours)

***Required*:** MATH 2215[1], MATH 2235, STAT 2013[2], **and** a minimum of 5 credit hours of electives chosen from the following: STAT 2023, STAT 3113, STAT 3123, MATH 3253, MATH 3302, MATH 3333, MATH 3302, MATH 4113, MATH 4433. ([1]Prerequisite: MATH 1513 and MATH 1613 or satisfactory placement score. [2]Prerequisite: MATH 1513 or satisfactory placement score).

MICRO-CREDENTIALS

A micro-credential is a short-term, post-secondary credential that equips learners with specific career critical knowledge, skills, and abilities that can be readily transferred to the workplace. A list of approved micro-credentials is available online.

PRE-PROFESSIONAL STUDIES

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 and faculty advisors at Cameron are familiar with the requirements of many professional schools and can assist in appropriate selection of courses.

PROGRAM	ADVISEMENT (DEPARTMENT)
Actuarial Science	Computing and Mathematical Sciences
Allied Health	Agriculture, Biology, and Health Sciences
Dentistry	Agriculture, Biology, and Health Sciences **OR** Chemistry, Physics, and Engineering
Engineering	Chemistry, Physics, and Engineering
Law	Social Sciences
Medicine	Agriculture, Biology, and Health Sciences **OR** Chemistry, Physics, and Engineering
Nursing	Agriculture, Biology, and Health Sciences
Optometry	Agriculture, Biology, and Health Sciences **OR** Chemistry, Physics, and Engineering
Pharmacy	Agriculture, Biology, and Health Sciences **OR** Chemistry, Physics, and Engineering
Physical Therapy	Agriculture, Biology, and Health Sciences **OR** Chemistry, Physics, and Engineering **OR** Sports and Exercise Science
Veterinary Medicine	Agriculture, Biology, and Health Sciences **OR** Chemistry, Physics, and Engineering

ADMISSIONS INFORMATION

UNDERGRADUATE ADMISSIONS

The Office of Admissions provides information to prospective students interested in attending Cameron University and typically serves as the first point of contact for prospective students, their parents, and academic counselors. The Office of Admissions also coordinates campus tours, college fairs, high school presentations, and other recruitment events throughout the year. For further information, visit the Office of Admissions website or e-mail admissions@cameron.edu.

ADMISSIONS COUNSELORS

Admissions counselors maintain contact with area schools and residents to inform them of the educational opportunities that exist at Cameron University. The Office of Admissions is responsible for the University's recruiting program. Campus tours may be arranged through the Welcome Center. The Office of Admissions provides information about scholarships. The priority deadline for applications is **February 1**.

ADMISSION REQUIREMENTS

Standards for admission to Cameron University have been established by the Oklahoma State Regents for Higher Education. These standards are based on prospective students' residence status and previous education background.

Students must meet the criteria for both the high school curricular requirements and the high school performance requirements as defined in the following sections.

Recent High School Graduate Admission

Baccalaureate Degrees, Associate in Science Degrees, and Associate in Arts Degrees. Minimum admissions requirements for recent high school graduates are:

- Graduate of an accredited high school or possess a GED, HiSet, or TASC.
- Meet the following performance requirements:
  - minimum composite ACT of 19 or SAT of 990, **OR**
  - rank in the top 50 percent of high school graduating class **OR**
  - have an unweighted high school (4 years) grade point average of at least 2.7 **OR**
  - have a 2.7 unweighted high school GPA in 15 units of core curricular courses
- Meet the minimum high school curricular requirements:
  - 4 years of English (grammar, composition, literature),
  - 3 years of mathematics (Algebra I, Algebra II, geometry, trigonometry, math analysis, pre-calculus, statistics and probability (must have completed geometry and Algebra II, calculus, and Advanced Placement statistics)
  - 3 years of lab science biology, chemistry, physics, or any lab science certified by the school district) (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),2 years of other (additional subject previously mentioned or selected from computer science, foreign language, or any Advanced Placement course, psychology, sociology).

Graduates of unaccredited high schools or home study programs. Minimum admissions requirements for recent graduates of unaccredited high schools or home study programs:

- must satisfy admissions requirements by taking the ACT or SAT and achieving a minimum ACT score of 19 or SAT of 990
- unaccredited high school graduates rank in the top 50 percent of high school graduating class **OR**
- have an unweighted high school (4 years) grade point average of at least 2.7 **OR**
- have a 2.7 unweighted high school GPA in 15 units of core curricular courses 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 in science, or associate in arts degrees.

Associate in Applied Science Degrees and Certificates. Minimum admissions requirements for recent high school graduates are:

- Graduate of an accredited/unaccredited high school or possess a GED, HiSet, or TASC.

Students lacking curricular and/or performance requirements may be required to take corequisite courses. These courses should be completed within the first 24 semester hours attempted, with a grade of "C" or higher. To transfer to an associate in science, associate in arts, or baccalaureate degree program, the student must formally apply by submitting a Change of Degree Program form and meet both the curricular and/or performance admission standards. (retention GPA of 2.0 and cleared all corequisite level courses).

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, HiSet, or TASC are eligible for admission to Cameron. Any student admitted through the Adult Admissions category must demonstrate college readiness through defined initial course placement, placement assessments or by successful completion of corequisite-level courses before entering baccalaureate, associate in science, or associate in arts degree programs.

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 will be admitted through associate degree standards. To transition to baccalaureate degree programs, students must successfully address all curricular and performance deficiencies and successfully complete twenty-four collegiate credit hours.

Concurrent High School Student Admission

A junior or senior high school student enrolled in an accredited Oklahoma high school may be admitted provisionally if the following criteria are met. The student must:

- Earn an ACT (National, Pre-ACT, or On-Campus ACT) composite score of 19 or higher **or** a SAT or PSAT score of 990 (940 prior to March 5, 2016) **or** have an unweighted high school grade point average of 3.0.

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:

- Completed enough high school coursework to be equivalent to an individual who is classified as a junior or senior at an accredited high school.
- Earn an ACT (National, Pre-ACT, or On-Campus ACT) composite score of 19 or higher **or** a SAT or PSAT score of 990 (940 prior to March 5, 2016) or higher.

All concurrently enrolled students must also:

- Provide a signed statement from the high school principal or counselor stating that the student will be eligible to satisfy high school graduation requirements (including curricular requirements for college admission) no later than the spring semester of the senior year.
- Provide a signed statement from parent(s) or legal guardian stating the student has permission to enroll concurrently.

A high school student may enroll in a combined number of high school and college courses per semester not to exceed a full-time college workload of 19 semester credit hours. Non-academic high school units are excluded from the workload calculation.

Special Non-Degree Seeking Student Admission

A student who does not plan to pursue a degree may enroll in no more than 12 credit hours without submitting academic credentials or meeting the academic curricular or performance requirements. Non-degree-seeking students may not enroll in areas of English, math, history, government, or science without showing proficiency in those areas. Retention standards will be enforced. Enrollment beyond 12 hours will require formal admission to the University.

Transfer Student Admission

A transfer student is defined as an undergraduate student with six or more attempted credit hours, excluding corequisite level credit hours and/or hours earned through concurrent high school enrollment.

Transfer students from other accredited colleges and universities who are legal residents of Oklahoma may transfer to Cameron University under the following conditions:

- Transfer students who have attempted 24 or more college credit hours will be required to submit official transcripts from all colleges attended and must have a retention GPA of 2.0 or higher.
- Transfer students with fewer than 24 attempted hours of college credit will also need to submit an official high school transcript or GED/HiSET/TASC transcript and meet high school performance and curricular requirements, as outlined in the high school curricular requirements, and/or show proficiency through college-level coursework. ACT and SAT scores are optional but can be used for admission.
- Any student who has attended another university other than Cameron University must submit official transcripts from ALL colleges attended. An undergraduate student with more than six attempted semester hours is considered a transfer student.

Transfer From Another Oklahoma Degree-granting Institution. A student may transfer to Cameron from another Oklahoma degree-granting 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 GPA 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 GPA 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 GPA 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 Out-of-State Degree-granting Institutions. The amount of credit granted to applicants for admission as transfer students depends upon the nature and quality of the applicant's previous work. Transfer credit is evaluated according to the academic requirements of the university and the following provisions:

A. Credits earned at institutions accredited by the HLC will be accepted for transfer at full value, excluding continuing education. In addition to meeting Cameron's entrance requirements, out-of-state transfer students must also meet the following:
   - Be in good standing at the transfer institution, and
   - Have made satisfactory progress (an average grade of "C" or better or met CU's retention standards, whichever is higher) at the transfer institution.

B. Credits earned at degree-granting institutions accredited by organizations other than the HLC and recognized by the USDE will be reviewed on a course-by-course basis and may be accepted in transfer if appropriate to a student's degree program and validated by a designee at CU. In addition to meeting Cameron's entrance requirements, out-of-state transfer students must also meet the following:
   - Be in good standing at the transfer institution, and.
   - Have made satisfactory progress (an average grade of "C" or better or met CU's retention standards, whichever is higher) at the transfer institution.

C. Credits earned at degree-granting institutions not accredited by organizations recognized by the USDE will be reviewed on a course-by-course basis and may be accepted in transfer if appropriate to a student's degree program and validated by a designee at CU. In addition to meeting Cameron's entrance requirements, out-of-state transfer students must also meet the following:
   - Be in good standing at the transfer institution, and
   - Have made satisfactory progress (an average grade of "C" or better or met Cameron's retention standards, whichever is higher) at the transfer institution, and
   - Must validate the transfer credit by successful completion (an average of "C" or better) of 12 or more credit hours at CU.

Admission of Students Suspended From Other Institutions. A student suspended for academic reasons from other institutions may appeal for admission to Cameron.

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 GPA is less than 2.0, the student will be admitted as a "transfer probation" student. Students seeking admission in this category must meet with an Admissions Coordinator regarding procedures and enrollment conditions.

Admission of Oklahoma State System Associate in Arts and Associate in Science Graduates. Students who have completed the requirements for an Associate in Arts or Associate in Science degree at an Oklahoma State System institution will be accepted as having fulfilled the general education requirements for baccalaureate degrees. Additional requirements must be met: (1) completion of any prerequisites required for the baccalaureate degree or major, (2) meeting any minimum grades required for the baccalaureate degree or major, or (3) meeting any professional licensing or certifying agencies requirements that exceed the general education requirements.

Opportunity Admission

Students who have not graduated from high school but whose final composite standard score on the ACT demonstrates the probability of success in college-level work may apply for full enrollment at 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. The Director of Admissions, the University President's designee, will determine admissibility.

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 an institutionally accredited U.S. institution of higher education) at the undergraduate level must present a TOEFL minimum score of 500 or higher on the paper-based test, 173 or higher on the computer-based test, 61 or higher on the internet-based test, or a 5.5 on the IELTS to meet the standards for unqualified admission to Cameron, 44 or higher on PTE, or 3.5 or higher on iTEP.

Transfer students who are non-native speakers of English must meet the transfer admission standards, dependent upon their educational background, or have attended a college or university where English is the primary teaching language in a country where English is a primary language and is recognized by professional organizations in the U.S. involved in admissions and international education for a minimum of 24 semester credit hours with passing grades, and also meet other transfer requirements.

Re-Admission

Any former Cameron student who did not attend Cameron during the previous two regular semesters must apply for re-admission.

Use of Non-Academic Criteria in the Admission of Students

Cameron University is committed to providing a safe learning and teaching environment for our students, faculty, and staff. As part of that commitment, the University considers the following non-academic criteria in admitting first time, transfer, or readmissions students: (a) whether applicants have pending charges; have been convicted of a felony, entered a plea of guilty or nolo contendere, or received a suspended or deferred sentence to a felony charge or are or would be obligated to register under the Oklahoma Sex Offender Registration Act or May Rippy Violent Crime Offender Registration Act (b) whether applicants have been suspended or expelled from high school, college or university for any reason other than academic performance; or whether applicants have any pending suspension or expulsion proceedings at a college or university for a reason other than academic performance. Students can contact Office of Admissions for review of the complete policy.

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 become the property of Cameron University. Examples include, but are not limited to, test score reports, GED reports, and transcripts.

NAME OR ADDRESS CHANGE

A student who has legally changed names 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. Students should ensure their current mailing address is on file at all times to receive all important information and notices. Students should log in to their AggieAccess accounts to update address information.

INITIAL COURSE PLACEMENT

Course placement in English, math, science, and reading courses for first-time freshmen will be determined by either ACT/SAT sub-scores, high school GPA, or computerized placement test (CPT) scores. Students who are under 21 will take CPTs unless they have either ACT or SAT scores (SAT will be equated to ACT equivalents) of 19 or higher in English, math, and reading or an unweighted cumulative GPA of 3.0 or higher on a 7 semester or final high school transcript. Adult students (age 21 or older) and active-duty military will be required to take the CPT unless they submit either optional ACT or SAT scores or have an unweighted cumulative GPA of 3.0 or higher on a 7 semester or final high school transcript.

Initial course placement for transfer students will include a transcript review for course equivalencies. Transfer students who do not have course equivalencies to establish placement in English, math and reading will be required to take the CPT unless they submit either ACT or SAT scores or have an unweighted cumulative GPA of 3.0 or higher on a 7 semester or final high school transcript.

PRIOR LEARNING CREDIT AND ASSESSMENT

Students enrolled at Cameron University may receive degree credit for post-secondary level extra-institutional learning related to subject areas, courses, and programs of study offered by Cameron University. The Vice President for Academic Affairs (VPAA) is responsible for developing and administering policies and procedures for awarding credit for prior learning. Assessment and awards of prior learning credit are made under policies and procedures designed to assure that reliable and valid measures of learning outcomes have been applied.

Cameron University offers students multiple options for earning college credit by demonstrating the knowledge they have gained via non-college experiences. Credit may be earned by completing standardized tests, by demonstrating course competency through departmental or national exams, by submitting International Baccalaureate transcripts, by submitting prior learning portfolios, and by submitting transcripts for workplace or military training recognized by ACE or NCCRS. In each case, credit for prior learning is awarded for verifiable skills and learning gained through the experience, and not for the experience itself.

The following regulations govern awarding of credit for prior learning at Cameron University:

- A maximum of 64 semester hours or prior learning credit may be applied toward the requirements for a baccalaureate degree.
- A maximum of 45 semester hours of prior learning credit may be applied toward the requirements for an associate degree.
- Prior learning credit may only be awarded in those academic programs approved by OSRHE to be offered at Cameron University, and must be validated by successful completion of 12 or more semester hours of academic work at CU before being placed on the student's transcript. Active duty military personnel are exempt from the 12 hour validation requirements, and may have credits placed on the transcript upon full admission and completion of first paid enrollment.
- Prior learning credit is identified on the transcript by “Adv Standing”.
- The neutral grade of satisfactory (S) will be assigned to prior learning credit.

- Credit granted will be included only in the number of hours earned, not in GPA calculations.
- Credit for non-collegiate schools, such as those offered by military services, businesses, industry, unions, or governmental agencies, will be awarded according to ACE and NCCRS recommendations.
- Credit for experiential learning will be granted on course-by-course basis using institutionally-prepared exams or review of experiential portfolios.
- A score equivalent to a grade of "C" will be used as the minimum passing score for institutionally-prepared exams.
- Credit for military occupational specialties (MOS) will be granted on course-by-course basis.
- 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.

Further information regarding prior learning credit can be found on the Academic Advising webpage.

ADMISSIONS RESIDENCE STATUS

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, 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 set criteria can be established as sufficient to guarantee classification as a resident of Oklahoma.

Independent Persons (Definition for Admissions Purpose). If a person enjoying majority privileges and who is independent of parental domicile can provide adequate and satisfactory proof of having come to Oklahoma with the intention of establishing domicile, that person 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 their own domiciliary status on a separate basis, except as provided in other sections of this policy.

Dependent Persons (Definition for Admissions Purpose). The legal residence of a dependent person is that of the student's parents, or the legal residence of the parent who has legal custody or the parent with whom the student habitually resides. If the student is under the care of those other than the parents, the legal residence is that of the student's legal guardian.

A dependent person may become emancipated (freed from the parental domicile) through marriage, formal court action, abandonment by parents, or positive action on the student's own part evidential of alienation of parental domicile. To qualify under the latter category, a dependent person must have completely separated 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 having come to Oklahoma with the intention of establishing domicile, the applicant 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 they hold "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 at least 12 consecutive months, and who meets the criteria for establishment of domicile as set forth in the policy of the Oklahoma State Regents for Higher Education.

Uniformed Services and Other Military Service/Training.

Active Uniformed Service/Discharged or Released from Active Uniformed Service for whom Oklahoma is the Home of Record. The following shall be eligible for in-state status:

- Members of the uniformed services, along with their dependent children and spouse, who provide evidence that they are full-time active duty status of more than thirty (30) days in the uniformed services **stationed in Oklahoma** or temporarily present through military orders. Further, when members of the armed services are transferred out-of-state, the member, their spouse and dependent children shall continue to be classified as in-state as long as they remain continuously enrolled.
- Regardless of the residency of the student, dependent children or spouse of a person who is currently serving as a member of the active uniformed services of the United States on full-time active duty status of more than thirty (30) days for whom Oklahoma is the home of record.
- Person, or dependent children or spouse of a person, who was discharged or released from a period of not fewer than ninety (90) days of active uniformed service and less than five (5) years before the date of enrollment in the course(s) concerned and for whom Oklahoma is the home of record.
- Former full-time active uniformed services personnel who remain in Oklahoma after their service may retain their in-state status without the 12-month requirement if they establish domicile as

defined in this policy.

Active Uniformed Service/Discharged or Released from Active Uniformed Service (Regardless of the Home of Record). Pursuant to Title 70, O.S., Section 3247 (as amended), the following is compliant with the eligibility criteria prescribed in the Veterans' Access, Choice, and Accountability Act of 2014.

A student who files with Cameron University a letter of intent to establish residence in the state and who **resides in the state** while enrolled at Cameron shall be eligible for in-state status if the student:

- was discharged or released from a period of not fewer than ninety (90) days of active duty uniformed service, less than five (5) years before the date of enrollment in the course(s) concerned, and is pursuing a course of education with educational assistance under Chapters 30, 31 or 33 of Title 38 of the United States Code while living in Oklahoma; or
- is entitled to assistance under Section 3311(b)(9) or 3319 of Title 38 of the United States Code by virtue of a relationship to a person who was discharged or released from a period of not fewer than ninety (90) days of active duty uniformed services, and enrolls in the course(s) concerned within five (5) years of the date the related person was discharged or released from a period of not fewer than ninety (90) days of active duty uniformed services; or
- is a person who is the spouse/dependent of an individual currently serving as a member of the active, uniformed services of the United States on full-time, active duty status of more than thirty (30) days and is using Chapter 30 or 33 GI Bill® benefits; or
- is a recipient of the Marine Gunnery Sergeant John David Fry Scholarship and is using it as a GI Bill® benefit *(GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website.)*

Military Reserve Member on Full-Time Active Duty. Regardless of the residency of the student, dependent children or a spouse of a person who is currently serving as a member of the military reserve on full-time active duty of more than thirty (30) days and for whom Oklahoma is the home of record shall be eligible for in-state status.

Reserve Officer Training Corps (ROTC). A student shall be eligible for in-state status regardless of the residency of the student if the student is a person who is participating in or has received a partial or full scholarship from the Air Force Reserve Officers' Training Corps, Army Reserve Officers' Training Corps, or the Navy/Marines Reserve Officers' Training Corps. "Participating" is defined as any student who is fully and actively participating in all aspects of the ROTC program (class, physical fitness training, leadership training (lab).

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 their non-resident parents.
2. The person is self-supporting as evidenced by having provided the majority of funds for their own upkeep.
3. The person must have maintained a continuous residence in Oklahoma for the period set forth above.

FINANCIAL INFORMATION

TUITION AND FEES

Tuition and other fees are established by the Oklahoma State Regents for Higher Education. All students are charged mandatory fees which includes charges for academic records, student technology, assessment, library services, student facilities, and student activities. Special fees are charged for other services which are made available to students. Descriptions for mandatory and special student fees are available on the Student Fees webpage.

FINANCIAL ASSISTANCE

Cameron offers many federal, state and institutional aid programs including tuition waivers, scholarships, grants, loans, and work study opportunities to assist students in their educational endeavors. The types and amounts of aid awarded are determined by financial need, student classification, academic merit, talent, and availability of funds. Students intending to apply for financial assistance should contact the Office of Financial Assistance well in advance of their desired start term. Application instructions and forms may be obtained online.

Applying for Aid

Applying for financial aid at Cameron University (CU) begins with the completion of the Free Application for Federal Student Aid (FAFSA). The FAFSA application is used to apply for nearly all types of financial assistance including federal, state, and institutional aid. The results of the application assist the financial aid office in determining how much and what type of aid may be awarded. Cameron University Scholarship opportunities may be viewed and managed online. Through this portal, all admitted students are automatically matched for institutional scholarships based on qualifications required for each scholarship. A small portion of institutional scholarships require the applicant to submit additional information. All freshmen must log onto the scholarship portal and apply for scholarships to which

they are auto-matched. If offered a scholarship, students must review the scholarship terms and accept them within the portal.

Types of Aid

***Federal Grants*.** Grants are financial awards that typically do not have to be repaid. Grants are normally awarded to students who are determined to have a high financial need based on completion of the FAFSA.

Direct Student Loans. The William D. Ford Federal Direct Loan Program allows students who are enrolled at least half-time to borrow money to help pay for and defer the cost of their college education. These programs require that all funds be repaid.

***Scholarships*.** A scholarship is a type of financial assistance that does not have to be repaid. Funds are provided through the institution, civic and religious organizations, professional groups, foundations, corporations, and cultural groups. Scholarships are based on academic excellence, personal skills, family affiliations, athletic ability, financial need, or other factors.

Tuition Waivers. Tuition waivers are institutional gift aid used to "offset" the cost of tuition. These waivers can be applied against in-state and out-of-state tuition. Most tuition waivers are awarded based upon high school grade point average, ACT/SAT scores, high school class rank, and transfer retention grade point averages.

All admitted students are automatically considered for tuition waivers, and, once awarded, must log onto the scholarship portal to accept the terms and conditions of the award. The priority deadline to apply is **February 1**.

Work Study. Work study is a student employment program that pays students to work in a variety of positions on campus. Students can use their work study earnings to help pay for tuition, fees, housing, and other expenses. Two types of work study are available: institutionally-funded and federally-funded. Enrolled students can find open workstudy positions on campus on the Student Employment webpage.

VETERANS BENEFITS

Cameron University is certified by the Oklahoma Department of Veterans Affairs State Approving Agency 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 is compliant with Public Law 115-407 (the Veterans Benefits and Transition Act of 2018).

Cameron University's Veterans Affairs Office (VAO) is an excellent source of information regarding various programs offered through the VA. The VAO can help students with the application process for benefits, university admission requirements, and required VA course certification. A primary function of VAO is certification of student enrollment and attendance to the VA. Eligible students are encouraged to use VAO services regularly.

Initiation and continuation of VA education benefits for eligible students is accomplished through the VAO. Students must submit paperwork indicating their intent to enroll at Cameron University and a request for assistance with benefits at least 10 weeks prior to the beginning of each semester. It is the responsibility of the student to report to the VAO prior to each semester.

Students utilizing VA education benefits must turn in all previous training records and transcripts to be evaluated for prior credit, whether or not prior credit is granted. Students utilizing VA education benefits may be in debt to the VA for withdrawal or early dismissal from the university. Students utilizing VA education benefits will only be certified for courses required to meet minimum graduation requirements for the student's approved VA Educational Objective. Students should contact the VAO regarding eligibility for in-state tuition. CU is compliant with 38 U.S. Code § 3679(c).

ACADEMIC REGULATIONS

REQUIREMENTS FOR GRADUATION

The responsibility for satisfying all requirements for a degree resides with the student. Advisors, faculty members, and administrators assist the student in meeting this responsibility. Certificates and degrees are conferred after the end of the term upon institutional verification that all requirements have been met.

Students who do not complete degree requirements within their intended graduation term are required to notify the Registrar's Office of their plans for finishing the degree.

The Registrar's Office has the authority to automatically award a certificate or associate degree at the end of a term once it is determined that a student has completed the necessary requirements. Students will be informed through their campus email account of the conferral notification.

Minimum Retention/Graduation GPA. Completion of the specified degree requirements with a minimum retention/graduation GPA of 2.0 and a minimum retention/graduation GPA of 2.0 in all work taken at Cameron University.

Minimum Hours in Residence–Baccalaureate Degrees. 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 in the major field must be satisfactorily completed at Cameron.

Minimum Hours in Residence–Associate Degrees. Associate degree candidates must complete a minimum of 15 semester hours in residence at Cameron University.

Minimum Total and Upper Division Hours at Baccalaureate Degree-granting Institution. 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.

Minimum Hours in Liberal Arts and Science-Baccalaureate Degrees. 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.

Minimum Hours in Liberal Arts and Science-Associate in Arts or Associate in Science Degrees. Associate in Arts and Associate in Science degrees must include a liberal arts and science component as follows: 37 semester hours minimum.

Additional Degree Requirements. Some degrees have requirements in addition to these University requirements. Consult the specific degree for a listing of any such requirements.

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.

GRADE POINT AVERAGE (GPA)

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 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 "AU", "AW", "I", "P", "RA", "RB", "RC", "RD", "RF", "S", "U", or "W" 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 developmental courses, "forgiven" courses, "reprieved" courses, and physical education activity courses.

GRADUATION UNDER A PARTICULAR CATALOG

The set of degree requirements needed for a student (undergraduate or graduate) to complete a degree is initially determined by the catalog in effect at the time of the student's initial enrollment. Students, in consultation with an academic advisor, may elect to fulfill the requirements from a more current catalog. All degree requirements in the chosen catalog must be met. Mixing of degree requirements from multiple catalog years is prohibited. Students who have had a break in enrollment at CU for one or more years (from the end of the last semester in which they were enrolled) will automatically be assigned to the current catalog year and required to meet current requirements.

Curricular requirements for baccalaureate and associate degrees can be changed for students only to the extent that such changes do not delay graduation or add additional hours to the program.

DEGREE WORKS (DEGREE AUDIT)

Degree Works provides an individualized degree audit for students using their specific major and catalog year. Each degree audit includes detailed information such as completed general education, university, major, option, and minor requirements, the courses applied to each requirement, the semester courses were taken, the grade in each course, and the requirements that remain incomplete. The online degree audit can be a useful tool in the advisement process, but it is not an official degree check and should not replace regular consultation with your academic advisor.

Students may view their individual Degree Works audit online in AggieAccess by clicking the My Info tab, under the Student Quick Links channel, click Degree Works, enter student ID to display the audit. An academic advisor can assist individual students with interpreting their Degree Works audit.

TRANSFER CREDIT EQUIVALENCY

Evaluation of course credit earned at other institutions does not guarantee approval of the credit for use toward CU degree requirements. Transfer courses previously evaluated and equated to a CU course or courses will be automatically transcripted as equivalent. Transfer courses not previously evaluated or equated to a CU course or courses may be approved for fulfillment of major/minor or general education requirements by petition as described below.

Major/Minor Requirements. Final approval of applicable transfer credits to meet major or minor requirements ultimately rests with the dean of the school offering the major or minor. This responsibility may also 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 Undergraduate Course Substitution/Waiver Request form. Permission for any other exception to stated requirements must be initiated through the dean of the school responsible for the major or minor and approved by the VPAA.

General Education Requirements. Final approval of applicable transfer credits to meet general education requirements ultimately rests with the VPAA or designee. Approved substitutions or waivers of general education

requirements must be documented (by signature and date) on the Undergraduate Course Substitution/Waiver Request form. Many courses from other Oklahoma institutions have been previously evaluated to determine statewide equivalency as part of the OSRHE Course Equivalency Project. Additionally, CU maintains a searchable Transfer Equivalency Database that contains course equivalencies from national and international institutions.

TRANSFER CREDIT LIMITATIONS

Credit accepted in transfer that is not in semester-credit-hours will be converted to semester-credit hours. Quarter hours are equated on the basis of three-quarter hours to two semester hours.

Semester-credit-hours will be awarded at a rate equal to the number of semester-credit-hours earned at the transfer institution. Credit accepted in transfer that is used to fulfill or waive a specific CU course or requirement will be awarded at a rate equal to the number of semester-credit-hours earned at the transfer institution, whether greater or lesser in hours than the CU course or requirement.

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.

Lower-level courses transferred from other institutions that have been equated to upper-level courses at Cameron will still be counted as lower level credit. In this event, a student may be required to complete additional upper-division hours for graduation. A minimum of 40 hours must be taken at the 3000/4000 level.

A maximum of 64 hours from a 2 year/community college will count toward the minimum hours to graduate with a baccalaureate degree. Any hours over the 64 may still be used to meet other graduation, specific course, certification, and/or prerequisite requirements. A minimum of 60 hours must be earned at a senior institution.

Credits from some technical colleges and professional schools may not be applicable toward specific degree requirements at CU due to the highly technical or specialized nature of the credits earned. They will apply as elective hours toward graduation up to the appropriate limits.

All transfer credit is calculated in the cumulative grade point average.

ARTICULATION POLICY

In accordance with OSRHE, Cameron University fully participates in the articulation policy for the transfer of students among Oklahoma public institutions. A student transferring to Cameron with an Associate of Arts or an Associate of Science degree from any State System institution will be considered to have completed the general education requirements of the baccalaureate degree. There may be some exceptions to this policy, where some students may have to take additional courses in general education to meet minimum professional certification requirements as defined by the state.

ARTICULATION AGREEMENTS

Cameron University accepts credits for courses offered by the partner institution as indicated in the articulation agreement. Students who graduate with the designated degree/program at the indicated partner institution will have satisfied CU's general education/university core requirements unless a course is a pre-requisite to a program requirement. Additional general education requirements and CU university requirements are specified in each articulation agreement. The articulation agreement also specifies which courses at the partner institution will count towards major courses at CU. Further information can be found on the Articulation Agreements webpage.

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 additional requirements for the second major, and
4. the U.S. History and American Government requirements.

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.

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.

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 their 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.

GRADUATION APPLICATION

Each degree candidate is expected to submit a graduation application online via Aggie Access at least one semester prior to the session in which the student expects to graduate.

Students who plan to participate in the commencement ceremony must submit their application by April 1 to ensure their name will appear in the commencement program.

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. A student may obtain a copy of their official transcript from the Registrar's Office at no charge. Students may request transcripts online, by mail/e-mail/fax, or in-person. Visit website for more information.

PRESENCE AT COMMENCEMENT EXERCISES

An annual commencement exercise is conducted at the end of the spring semester. All undergraduate and graduate students who have completed graduation requirements the prior December, or who expect to complete graduation requirements in May, July or upcoming December are eligible to participate in the commencement ceremony. **Participation in the commencement ceremony does not indicate that graduation requirements have been met**.

Students who plan to participate in the commencement ceremony must submit their graduation application by April 1 to ensure their name will appear in the commencement program. Graduation applications will be accepted through the end of the term in which a student intends to graduate, but the student's name will not appear in the commencement program if submitted after April 1.

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 GPA of 4.00 graduates "summa cum laude," one whose cumulative GPA is less than 4.00 but is 3.80 or above graduates "magna cum laude," and one whose cumulative GPA is between 3.60 and 3.80 graduates "cum laude." These honors are listed on official Cameron University transcripts, and honor graduates are formally recognized at the commencement.

ACADEMIC LOAD

Academic load includes all courses in which a student is enrolled.

- Academic load for a regular semester is 15 semester hours and for a summer or 8-week session is 9 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 a retention GPA 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. A student who meets these qualifications should contact the Registrar's Office to have their maximum hours raised.
- All other overloads must be recommended by a student's 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, or short course can never exceed one and one-half times the number of weeks in the semester, summer session, or short course.

FULL-TIME UNDERGRADUATE STUDENT

An undergraduate student who enrolls in 12 or more hours during a regular semester or 6 or more hours during a summer semester is classified as a full-time student. Students who wish to stay on track to graduate in four years will need to average 15 hours per regular semester or 30 hours per academic year. Some university scholarships and awards may require enrollment in 15 hours per semester.

UNDERGRADUATE STUDENT CLASSIFICATION

Freshman:	0-29 semester hours earned
Sophomore:	30-59 semester hours earned
Junior:	60-89 semester hours earned
Senior:	90 or more semester hours earned

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 considered late enrollment. Late enrollments require permission from the instructor(s), chair(s), and dean(s) responsible for the course(s) in which a student wishes to enroll as well as the VPAA or designee. Any student enrolling late will be responsible for making up all work of the classes in which they enroll but is not guaranteed credit for any late work.

CHANGING COURSE SCHEDULES

Students who wish to make schedule changes must adhere to the following deadlines:

- *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 ten days of a regular semester, first five days of a

summer or eight-week session or proportionate period of a special schedule, will not be recorded on a student's academic record.

- *Withdrawing from Courses.* Courses from which a student withdraws after the drop period 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."

Students may not withdraw from classes after the twelfth week of a regular semester or proportionate period of other sessions.

To add, drop, or withdraw from a class, students should contact their advisor, or, if they possess their PIN, can process their own adds, drops, and withdrawals in AggieAccess. A student's advisor should be listed in AggieAccess under the MyInfo tab in the Academic Profile box. Deadlines for adding, dropping, and withdrawing from courses are listed on the academic calendar.

Non-attendance or ceasing to attend class does not constitute official withdrawal.

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 they 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.

SENIOR CITIZEN AUDITORS

Senior Citizens that are age 65 or older qualify for a tuition and fee waiver when enrolling in a course for Audit per State Regents Policy.

Auditing of Classes by Senior Citizens. State System institutions are hereby authorized to waive the tuition and fees for auditing of classes for residents of the state of Oklahoma who are sixty-five (65) years of age or older. Such students may be admitted without charge to classes on a space available basis (State Regents Policy 4.18.5.3a)
Senior Citizens wishing to enroll for audit may visit with the Office of the Registrar, North Shepler, Room 205 or email.

ATTENDANCE

A student is responsible for the content of each course in which they are 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 will be stated in writing and distributed. It is a student's responsibility to note these instructions and follow them consistently and carefully.

LEAVE OF ABSENCE DUE TO MILITARY SERVICE

Cameron University will grant a leave of absence, which shall not exceed a cumulative five (5) years, to a student who is a member of the active uniformed military services of the United States and called to active duty. The student shall be eligible to:

1. Withdraw from any or all courses for the period of active duty service without penalty to admission status or GPA and without loss of institutional financial aid; or
2. Receive an "I" for any or all courses for the period of active duty status irrespective of the student's grade at the time the "I" is awarded; provided, however, that the student has completed a minimum of fifty percent (50%) of all coursework prior to being called to active duty and the student completes all courses upon return from active duty. The student's admission status and GPA shall not be penalized and the student shall not experience loss of institutional financial aid.

Military students (including students utilizing VA Educational benefits) encountering special circumstances impacting their academic enrollment with Cameron University may submit a Special Request for Late or Retroactive Withdrawal to Academic Affairs. Students may request financial and/or academic relief through this process. If the request is due to unexpected military deployment which interrupts or precludes the completion of course(s), it must be accompanied by military documentation. Requests for academic and financial relief are reviewed by the Office of Academic Affairs and the Business Office, respectively, on a case-by-case basis.

EXCUSED ABSENCES DUE TO RELIGIOUS HOLIDAYS

It is the policy of the university to excuse the absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays.

MAKE-UP EXAMINATIONS DUE TO UNIVERSITY-SPONSORED ACTIVITIES OR LEGALLY REQUIRED ACTIVITIES

In case of student absence due to participation in university-sponsored or legally required activities,

faculty, if given notice two class periods or one week (whichever is less) prior to an exam (other than final exams) or quiz (excluding pop quizzes), should make every effort to find a reasonable accommodation for the student. Students missing an exam due to jury duty must be allowed an accommodation.

WITHDRAWING FROM THE UNIVERSITY

Non-attendance or ceasing to attend a class does not constitute official withdrawal. It is a student's responsibility to complete the withdrawal process. A student may not withdraw during the last four weeks of a semester or proportionate period of other sessions. A student who is unable to personally complete the withdrawal process due to unavoidable circumstances should contact the Registrar's Office as soon as possible. The deadline for submitting a request for late or retroactive withdrawal due to unavoidable circumstances that prevented withdrawal by the last date to withdraw is no later than one academic year following the semester in which the course was offered. Requests that are not received within this timeframe will not be considered.

CREDIT HOURS

Cameron University strictly adheres to the policies of the Oklahoma State Regents for Higher Education when defining academic sessions and credit hours (OSRHE Policy and Procedures Manual, Section 3.19.2.) Per OSRHE mandate, all classes taught during the standard term are expected to meet for sixteen, twelve, or eight weeks in the Fall or Spring semesters; four, six, or eight weeks in a summer session; or an equivalent number of days/weeks between a semester and/or session for intersession. No institution, academic department, or individual faculty member is authorized to reduce the number of academic weeks in the standard semester without specific approval of OSRHE.

The semester-credit-hour is the standard and traditional unit of credit to be used by Cameron University in evaluating a student's educational attainment and progress for all programs. A semester-hour of credit is calculated as follows:

- One semester-hour of credit is normally awarded for completion of a course meeting for 800 instructional minutes, (50 minutes/week for sixteen weeks; 100 minutes/week for eight weeks; 200 minutes/week for four weeks), exclusive of enrollment, orientation, and scheduled breaks. Organized examination days may be counted as instructional days.
- Laboratory credit is normally awarded at a rate not to exceed one-half the instructional rate. One semester-hour of credit is normally awarded for completion of a laboratory meeting a minimum of 1600 minutes (100 minutes/week for sixteen weeks; 200 minutes/week for eight weeks).
- Instruction offered through a combination of class and laboratory meetings would normally observe the standards set forth above on a pro rata basis. For example, a course offered for four semester-hours of credit might meet for 100 minutes of organized instruction plus 200 minutes of laboratory per week for 16 weeks.
- Block or alternative course schedules may also occur within the dates set forth for a semester or summer session. Courses offered during academic terms shorter than a semester will observe the same academic standards involving instructional hours per semester-credit-hour as those courses offered during a standard academic semester. Institutions are encouraged to be flexible in offering courses in alternative schedules to meet student and employer needs.
- A student enrolled in a Study Abroad course is earning course credit, therefore, the course will be considered part of the student's enrollment status for determining Title IV financial aid eligibility.

There are alternatives to reliance on time-in-class as the basis for determining academic credit-hours earned. The achievement of academic credit-hours should be linked to demonstrated student learning either through regular class assignments and evaluations or demonstration of competencies. When determining the appropriate academic credit for non-traditional or accelerated format courses, institutions must adhere to the HLC Handbook of Accreditation Standards. HLC requires institutions to rigorously assess student learning outcomes consistently across all formats. Institutions offering courses in accelerated or other non-traditional formats are expected to be especially diligent in documenting that students in these courses master the skills and knowledge expected of students in traditional courses.

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; a course numbered 0103 is a developmental (non-college level) course carrying three semester hours of enrollment (will not contribute to hours attempted or earned).

DEVELOPMENTAL EDUCATION

Any student who is determined to be below college level in English, reading, or math will be required to take corequisite instruction classes simultaneously with their English and/or math courses. These corequisite courses are not credit-bearing and are linked to college-level, credit-bearing courses. Students should complete any developmental course requirements within the first 24 attempted hours.

PREREQUISITES AND COREQUISITES

Enrollment in some courses is restricted to students who have taken or are taking 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. In general, prerequisites are courses or conditions that must be completed **prior to** enrollment in a particular course; corequisites are courses or conditions that must be taken **simultaneously with** another course. Prerequisites and corequisites are listed with the course descriptions.

GRADING SYSTEM

Academic performance at Cameron University is evaluated using the following grading system:

GRADES USED IN CALCULATING GPA

GRADE	NOTE	PTS/HR
A	EXCELLENT	4
B	GOOD	3
C	AVERAGE	2
D	BELOW AVERAGE	1
F	FAILURE	0

GRADES NOT USED IN CALCULATING GPA

GRADE	NOTE
RA, RB, RC, RD, RF	REMEDIAL/DEVELOPMENTAL
S	SATISFACTORY
U	UNSATISFACTORY
P	PASS

SYMBOLS USED TO INDICATE COURSE STATUS

SYMBOL	NOTE
I	INCOMPLETE
AW	ADMINISTRATIVE WITHDRAWAL
AU	AUDIT
W	WITHDRAWAL
NR	GRADE NOT REPORTED
X	THESIS IN PROGRESS

"RA-RB-RC-RD-RF" Grades. The grades of "RA-RF" are used in grading zero-level or developmental courses. Developmental courses are not applicable to any degree requirements and do not contribute to hours attempted or earned. The "RA-RF" grade is GPA neutral.

"S-U" and "P-NP" Grades. The grades of S (satisfactory), U (unsatisfactory), P (Pass), and NP (No Pass) may be used in grading certain courses at the discretion of the instructor offering the course, with prior approval of the department chair. When a course is selected for S-U or P-NP grading, the entire class must be graded on the same basis. The grade of "S" will also 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. At the undergraduate level, a grade of "S" signifies work of D quality or better (except in the case of credit earned by advanced standing examination, when the grade of "S" represents work of C quality or better). While all four grades "S, U, P, NP" are GPA neutral, they are counted in the total number of attempted hours for retention and the total number of attempted and earned hours for graduation.

"W" Symbol. A "W" may be awarded only if the student initiated and completed withdrawal from a course during the allowable withdrawal period. The "W" grade is GPA neutral.

"AW" Symbol. An "AW" is assigned by the VPAA or designee to indicate that the student was "involuntarily" administratively withdrawn from class(es) after the institution's drop/add period for disciplinary or financial reasons or inadequate attendance. The "AW" grade is GPA neutral.

"AU" Symbol. Audit status is used for a student who is not interested in obtaining a course grade, but who is enrolled to get course content knowledge. The "AU" grade is GPA neutral.

"I" Symbol. An incomplete may be given (at an instructor's discretion) to a student to indicate that additional work is necessary to complete the course. It is not a substitute for an "F," and no student may be failing a course at the time an "I" grade is awarded. To receive an "I" grade, the student should have satisfactorily completed a substantial portion of the required course work for the semester or session. 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 Incomplete Grade Form that is filed with the Registrar's Office.

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. If, by the end of the year, no change in grade has been submitted, the grade of "I" will become permanent. In no case will an "I" be changed to an "F" after a student has graduated. "I" grades are neutral and not counted in GPA calculations.

"JA-JB-JC-JD-JF-JU-JS" Grades. Only 64 hours are allowed to transfer from a two-year institution. If more than 64 hours are earned, classes will be noted with the above grades and will not satisfy any credit hour requirement, but will be included in retention and cumulative grade point averages.

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 their chair and dean. In the event of the instructor's absence, death, or disability, the grade may be changed by the Department Chair.

Repeating Courses. Repeating a course does not remove the previous grade from the student's record. Furthermore, repeated course credit hours may not be counted toward graduation requirements unless a course is so identified in the course description.

SCHOLASTIC REQUIREMENTS FOR CONTINUED ENROLLMENT

Retention Standards. Students must maintain a retention grade point average of 1.7 or greater during the first 30 attempted semester hours and a retention GPA 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. Students with 0 to 29 semester hours attempted and a retention GPA of 1.7 to 1.99 will be placed on academic notice. 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 they are placed on academic suspension. 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 Re-admission. A student who has been academically suspended from the university for the first time are not allowed to attend for one regular (Fall or Spring), although a student may appeal for immediate reinstatement. Two categories of students who may appeal for immediate reinstatement, with the understanding that reinstatement does not remove the record of suspension.

1. Students suspended due to “extraordinary personal circumstances” will have requests for immediate reinstatement 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, they cannot return to the university until such time as they have demonstrated, by attending another institution, the ability to succeed academically by raising their GPA to retention standards.

Copies of appeals procedures and the conditions and procedures for readmission may be obtained from the Office of Admissions.

SUBSTITUTION AND WAIVER OF COURSES

Petitions to substitute or waive courses designated as necessary to fulfill general education requirements must be approved by the VPAA or designee. 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 Undergraduate Course Substitution/Waiver Request form. 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 VPAA.

In all instances of substitution and waiver of courses, lower-division coursework cannot substitute for upper-division credit-hour requirements. However, the content is transferable. The content and learning competencies acquired in lower-division coursework will not need to be repeated, but students must still fulfill the full amount of

upper-division credit-hours required for a baccalaureate degree, without exception.

ACADEMIC FORGIVENESS POLICY

Circumstances may justify a student being able to recover from academic problems in ways which do not forever jeopardize the student's academic standing.

Academic forgiveness may be warranted for currently enrolled undergraduate students in three specific circumstances:

A. Repeated Courses. A student shall have the prerogative to repeat any courses up to 4 attempts, including the initial attempt, to achieve a higher grade. Only the highest grade earned of the 4 attempts will be used in the calculation of the GPA. Any attempt after the first 4 attempts will be used in the calculation of the GPA. All attempts shall be recorded on the transcript with the earned grade for each course listed in the semester earned. Exceptions to the limit to the number of attempts may be approved at the discretion of the VPAA or their designee.

B. Academic Reprieve. Academic reprieve is a provision allowing a student who has experienced extraordinary circumstances to disregard up to two semesters in the calculation of their GPA.

A student may request an academic reprieve if the following criteria are met:

1. Since the term(s) for which the student is requesting a reprieve, the student must have (1) taken a minimum of 12 credit hours, excluding activity and performance courses and (2) earned a GPA of 2.0 or higher with no grade lower than a "C" in all regularly graded course work This coursework may have been completed at any accredited higher education institution;
2. The request may be for one semester or term of enrollment or two consecutive semesters or terms of enrollments. If the reprieve is awarded, all grades and hours are included during the semester(s) for which a reprieve has been requested. If the student's request is for two consecutive semesters, Cameron University may choose to reprieve only one semester; and
3. All courses remain on the student's transcript but are not calculated in the student's GPA. Course work with a passing grade included in a reprieved semester may be used to demonstrate competency in the subject matter. However, the course work may not be used to fulfill credit hour requirements.

Students may not receive more than one academic reprieve during their academic career. Students will not be eligible to receive a reprieve if a previous reprieve request was denied at Cameron University. Students should contact the Registrar's Office concerning the process for requesting a reprieve.

C. Academic Renewal. Academic renewal is a provision allowing a student who has had academic trouble in the past and who has been out of higher education for a number of years to recover without penalty and have a fresh start. Under academic renewal, course work taken prior to a date specified by Cameron University will be excluded from a student's GPA. A student may request academic renewal if the following criteria are met:

1. At least three years must have elapsed between the last semester being renewed and the renewal request;
2. Since the final term the student requests to be renewed, the student must have (1) taken a minimum of 12 credit hours, excluding activity and performance courses and (2) earned a GPA of 2.0 or higher with no grade lower than a "C" in all regularly graded course work This coursework may have been completed at any accredited higher education institution;
3. The request will be for all courses completed before the date specified in the request for renewal.; and
4. All courses and grades remain on the student's transcript, but are not calculated in the student's retention/ graduation GPA. Neither the content nor credit hours of renewed course work may be used to fulfill any degree or graduation requirements.

If a student has received a renewal at another state system institution in Oklahoma, the student may request a renewal at Cameron University. Whether accepted or denied, this review will constitute the student's sole request for renewal at Cameron University. Students should contact the Registrar's Office concerning the process for requesting a renewal.

ACADEMIC TRANSCRIPT

The transcript is a full and accurate accounting of the facts of a student's academic life. All courses, including those classified as developmental, reprieved, and forgiven, are recorded on the academic transcript.

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 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.

THE DEAN'S AND PRESIDENT'S HONOR ROLLS

The Dean's Honor Roll, published each semester, includes all full-time Cameron University students whose semester GPA is 3.0 or better. Full-time students earning a 4.0 semester GPA are included on the President's Honor Roll. Full-time status is determined by semester hours earned in college credit classes.

STUDENT PROGRAMS AND SERVICES

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

NEW STUDENT ORIENTATION

The successful transition from an admitted student to a committed student ready to succeed at Cameron University is facilitated through Enrollment Days and Orientation sessions. On Enrollment Day, students will meet with an academic advisor, register for classes. and get questions answered. Numerous sessions are offered throughout the summer to accommodate the needs of incoming students. During the Orientation session, students will learn about adjusting to college life, getting involved on campus, interacting with professors, and being successful as a Cameron student. Contact the Office of Enrollment Management for more information.

ACADEMIC ADVISING CENTER

The Academic Advising Center is a central location for academic advising and resources for concurrent and entering undergraduate students. The Academic Advising Center is located on the first floor of North Shepler and can be reached by email advisingcenter@cameron.edu. An academic advisor for Cameron University-Duncan students is located on the Duncan Campus.

OFFICE OF FINANCIAL ASSISTANCE

The Office of Financial Assistance provides financial counseling, administers scholarships, grants, loans, and student employment. Interested students should reference the Financial Information section of this catalog. For further information on application procedures, contact the Financial Assistance Office, financialaid@cameron.edu.

ON-CAMPUS HOUSING

On-campus housing provides the opportunity for involvement within a living-learning community. Cameron University provides two options for on-campus living: Cameron Village and Shepler Center. Cameron Village combines all the amenities of an apartment complex with the convenience of on-campus living. Shepler Center, comprised of two ten-story high-rises, provides Cameron students with a more traditional living-learning environment. Contact Student Housing and Residence Life (housing@cameron.edu) for further information about living on campus.

STUDENT DEVELOPMENT

The Office of Student Development offers services, programs and activities designed to enhance the collegiate experience and to foster both academic excellence and personal growth. The Office of Student Development is responsible for Disability Services, CARE Requests, and Student Conduct. For additional information, e-mail student_development@cameron.edu.

STUDENT ENRICHMENT CENTER

The Student Enrichment Center (SEC) provides a variety of support services to students facing obstacles to successful degree completion. Student Success Coaches work individually with students to improve study skills and navigate academic life. A Financial and Community Resource Specialist answers questions about applying for financial aid, including federal grants and loans and institutional and external scholarships, coaching on financial literacy topics and a variety of community resources that address food, housing, mental health, healthcare, and other needs. The Work-based Learning Experiences Coordinator helps students develop job skills and professional development through the work-study program, job shadowing, and internships. The Student Enrichment Center is funded through a Title III Strengthening Institutions Federal Grant. The SEC is located on the second floor of Nance Boyer in Room 2075. For more information, contact the Student Enrichment Center.

DISABILITY SERVICES

Cameron University recognizes that all students deserve an equal opportunity to participate in university life and attain a higher education. The Office of Student Development 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 prior to the start of the semester or as soon as possible to complete the required documentation for accommodations. Please contact the office immediately (student_development@cameron.edu) if you have any concerns or problems with an accommodation or need more information.

TESTING CENTER

The Testing Center is responsible for coordinating, administering, and scoring a wide range of national, international, and local tests for the Cameron community and the general public. Tests offered include National and On-campus ACT (American College Test), CLEP (College-Level Examination Program), DSST (DANTES Subject Standardized Tests), SAT (Scholastic Aptitude Test), and the Institutional TOEFL (Test of English as a Foreign Language).

Additionally, the Testing Center administers computerized placement tests (CPT) for writing, reading, and math; provides opportunities for gaining credit for certain college courses; 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 low-distraction, comfortable environment. For more information, contact the Testing Center testingcenter@cameron.edu.

Cameron University–Duncan's Testing Center offers

the On-Campus ACT, CPT, and also proctors computer-based tests for Cameron and other universities. For scheduling or more information, email Duncan@cameron.edu.

TRIO PROGRAMS

Cameron University hosts three TRIO programs that are funded under the Higher Education Act. 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 (SSS) offers academic advisement, enrollment, peer mentoring, free tutoring, financial aid information, SSS sections of certain classes, and a variety of enrichment workshops and cultural activities to Cameron participants. Participation in SSS provides personal and academic enrichment for students who may face economic, social, and cultural barriers to higher education. SSS maintains information on campus and community resources and refers members to appropriate offices and agencies.

Applicants to the program must be a U.S. citizen or permanent resident AND meet at least one of the following criteria:

- Be a **first-generation** college student pursuing a four-year degree.
- Meet federal guidelines for having an **economic need**.
- Have a documented learning or physical **disability**.

For more information, contact Student Support Services.

Open Doors

Open Doors (Educational Talent Search) is an outreach program that provides information, educational guidance counseling, and support for Lawton Public School secondary students whose parents did not complete a Bachelor's degree and/or come from low-income households. Offices opened for this community outreach project in 1991. For more information, contact Open Doors.

Upward Bound

Upward Bound was established on campus in 1991 to provide rigorous academic instruction, individual tutoring and personal, career, and academic counseling for Lawton Public School, college-bound, high school students who come from low-income households. For more information, contact Upward Bound.

ACADEMIC SUPPORT AND TUTORING

The Cameron University Tutoring Center, located in the Eugene D. McMahon Library, is open to all Cameron students, providing assistance to students in all disciplines with an emphasis on general education courses. Center staff are available to help with content tutoring, computer literacy, study skills, time management skills, and test preparation strategies. Computers are available for student use.

The Language Learning Center is located on the second floor of Nance Boyer Hall in Room 2005. All CU students may use the Center's media programs to study more than 36 foreign languages.

Cameron University-Duncan's Tutorial Lab offers tutoring services for Duncan area students. Lab hours are posted online and no appointment is necessary.

Cynthia Ross Hall Laboratory is located on the first floor of Ross Hall in Room 100, and provides computers for student use.

LIBRARY

The Eugene D. McMahon Library promotes scholarly inquiry and work by providing materials and services associated with the access and use of information. Access to print and electronic materials is available in the physical library and through the library's webpage. The library houses comfortable work areas, a fully-equipped computer lab, and a group of friendly staff members trained to assist Cameron University patrons with their library needs.

Cameron University-Duncan students may request library materials to be sent to the Duncan campus at no additional charge via Interlibrary Loan (ILL) and access reference assistance through chat, email, or phone.

RESEARCH

With the aim to support the teaching mission at Cameron University, 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.

HONOR SOCIETIES

Cameron University currently has 18 nationally and internationally recognized honor and professional societies that 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 appropriate academic department.

EVENTS AND ACTIVITIES

Cameron University recognizes the importance of co-curricular activities and the role they play in the college experience. The Office of Events and Activities strives to provide a variety of activities and to engage students in campus life.

Student Activity Facilities

The Office of Events and Activities, located in the McMahon Centennial Complex 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 McMahon Centennial Complex (MCC) is a state-of-the-art student activities facility located in the heart of the campus. The MCC houses the Clarence Davis Student Union, which provides students with a place to study, dine, and interact with each other, complete with a food court and game room. Other amenities include the Inasmuch Art Gallery, meeting rooms, and the McCasland Ballroom, a divisible ballroom available to the community for proms, weddings, workshops, banquets, meetings, and other special events.

The McMahon Center, located adjacent to Cameron Village, provides students a place to relax and study. The facility features a fireplace, television, pool table, library, computer lab, and more. The facility also serves as host to press conferences, luncheons, and social activities. The McMahon Center also houses the Office of Student Housing and Residence Life and a faculty-in-residence.

Cameron Stadium seats approximately 10,000 people around artificial turf and is the site of the university's gala commencement ceremony each spring. The stadium is used by local area high schools on a regular basis for football and soccer games. In addition, marching band tournaments still fill the air with music.

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 McMahon Field and Athletics Center is the home of the Aggie softball team and also provides a weight room for all Aggie athletes in addition to an indoor practice area with batting cages utilized by both softball and baseball teams. The complex also includes dressing and locker rooms for the softball team and umpires, a press box, a concession facility, an equipment storage room, covered bleachers, and landscaped patio spaces with sun shades for additional viewing areas.

Aggie Gym is located on the northern edge of campus across from the University's administration building. In addition to the arena, the facility also houses a complete training room, weight room, classroom space, coaches' offices, four locker room areas, and boasts a seating capacity of nearly 1,800.

The Streich-Henry Tennis Complex, built in 1978, houses the home courts of Cameron's nationally ranked men's and women's tennis teams. The complex features eight courts, allowing the Aggies to host a variety of events ranging from dual matches to multi-team high school regional tournaments. The complex is located directly west of the Shepler Center dormitories, allowing for ample parking at Cameron tennis events, and features a multi-faceted structure that provides covered bleachers, restrooms and a locker room area for the Aggies.

The Aggie Rec Center is a 30,000 sq. ft. facility that 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 accessible.

Students who attend the Cameron University–Duncan campus may use the Simmons Center in Duncan for recreation and fitness classes. Online students who live in the Duncan area may also qualify for Simmons Center membership. More information is available online or by calling the Duncan campus.

Programming Activities Council

The mission of the Programming Activities Council (PAC) is to enhance the college community one experience at a time. PAC hosts events and activities such as comedians, arts and crafts events, bingo nights, hypnotists, and other interactive events for the university. Cameron University-Duncan's PAC provides a variety of activities on the Duncan campus. For more information see Cameron University-Duncan PAC.

Student Government

The Student Government Association (SGA) is the governing body representing all students in the shared governance process at Cameron University. 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 Association is to promote the interests and welfare of the student body.

Student and Departmental Organizations

Cameron recognizes approximately 30 student organizations with varying interests. The focus of the groups range from academic to social to religious to political. By participating in departmental clubs, honor societies, and special interest organizations, students develop life skills and enrich their college experience. Students interested in joining or starting a group should contact the Office of Events and Activities.

Cultural Programs

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

The Lectures 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 Arts and Sciences offers a variety of arts

activities and opportunities, which are open to all Cameron students regardless of major. The Department of Art, Music, and Theatre Arts sponsors frequent student gallery shows as well as workshops and exhibits by well-known visiting professionals, offers multiple annual musical and theatrical productions, and offers student musicians a choice of wide array of instrumental ensembles and choirs. Cameron's award-winning Speech and Debate Team, sponsored by the Department of Communication, English and Foreign Languages, competes at the national level.

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

Cameron University's Academic Festivals are dynamic, privately funded symposia that provide in-depth study into a single topic over the course of an academic year. Held every three years, these festivals feature nationally recognized speakers and unique public events. Cameron's academic festival series has established a reputation for bringing thought-provoking, informative and entertaining speakers to Southwest Oklahoma. More information about previous or upcoming Academic Festivals is available online.

Cameron Athletics

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

The Cameron Aggies sponsor 15 NCAA Division II athletic programs and are a proud member of the Lone Star Conference. The 15 CU teams include men and women's teams for basketball, outdoor and indoor track, cross country, tennis, and golf as well as baseball, softball, and volleyball. The Aggies have a long-standing tradition of excellence and have won a remarkable number of conference, regional, and national championships. Strength and Conditioning and Athletic Training are also included within the Athletic Department. Scholarships are available in each of these sports/areas. Information can be obtained by writing to the Director of Athletic Administration, who will forward inquiries to the appropriate head coach.

Intramural Sports

The Intramural Sports program offers students, faculty, and staff the opportunity to participate in many sports and activities on a competitive and recreational level. All skill levels are welcome, and there is no fee to participate. Sports include flag football, basketball, bowling, golf, soccer, and many more. For more information, contact Campus Life.

Esports

The Pickaxes, CU's esports team, competes at the varsity level in "League of Legends®" and "Overwatch®," as well as "Rocket League®" and "Super Smash Bros®." The Pickaxes Esports Arena is located in the Academic Commons 131 Suites. Team members compete using advanced gaming PC battlestations, and the Pickaxes Shoutcasters broadcast matches through Twitch® and YouTube®. CU students compete with other universities and in events throughout the year for a chance to win prizes and scholarships and prestige. Established with a generous grant from the McMahon Foundation in 2019, The Pickaxes is open for tryouts to all full-time CU students. Esport athletes and broadcast shoutcasters are required to have a minimum GPA and attend scheduled practices, scrimmages, tournaments and events through the regular school year.

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 at Cameron University

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

STUDENT PUBLICATIONS

***The Collegian* (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. *The Collegian*, programming from CUTV, and several wikis and blogs are presented through AggieCentral, Cameron's convergent journalism website. *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 Gold Mine

The Gold Mine began in 2009 as a student produced journal. From the submissions, editing, layout and print—the entirety of the journal is a creation of volunteer Cameron University students. The journal features nonfiction and fiction stories, poetry, and art work from current CU students and is available in print and online.

KCCU Radio

KCCU FM is the public radio voice of Cameron University, featuring programming from National Public Radio (NPR) and other public radio sources. KCCU is a nationally recognized, award-winning public radio station that serves numerous communities from its studios on the Cameron campus. KCCU is also a leader in the broadcast industry in innovative uses of radio technology, including HD Radio. FM stations, along with website streaming, provide public radio service to a large section of Western, Southwestern, and South-central Oklahoma, and parts of North Texas. The station features NPR news; Texas/Oklahoma news; classical music; jazz; and other specialty programming. KCCU is operated by a professional staff with the assistance of Cameron University students enrolled in communication courses and other majors. KCCU hires part-time student production assistants and news reporters to give them professional experience in the broadcast industry, and utilizes student interns each semester who enroll in communication courses. KCCU is also an outreach for Cameron University, building upon the university's community service efforts. KCCU is a non-commercial public radio network that relies upon financial support from 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 features a bulletin board of daily activities and events of interest to students, faculty, and staff members. The Department of Communication, English and Foreign Languages 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 AND CONDUCT

The *Student Handbook* is an official publication that explains university policies and procedures and provides that information for all aspects of university life. Students are responsible for knowing its contents. For questions regarding the Student Handbook, please contact the Office of Student Services, North Shepler 324.

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 a safe 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 committee. 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. 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 and Personally Identifiable Information.

***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 Registrar's Office. This information consists of:

- *Full name*
- *Mailing address*
- *Telephone number*
- *Enrollment status*
- *Academic classification*
- *Degrees and awards received*
- *Dates of attendance*
- *Date of graduation*
- *Athletic program information*
- *Previous institution most recently attended*
- *Participation in officially recognized organizations, activities*
- *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 Registrar's Office 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 Student Housing 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 Student Services, North Shepler 324.

Emergency situations may develop which could necessitate 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 release of the information. In cases where the responsible administrator is not available to make the decision, or, if they decide not to release the information, an appeal to secure the information may be made to the university president.

CAMPUS DINING

Food service is provided at two locations, the McMahon Centennial Complex, which features a food court, and the Shepler Cafeteria. The McMahon Centennial Complex offers such items as pizza, deli subs and sandwiches, hot grill items, "grab and go" items, coffee, smoothies, and other drinks. Items may be purchased using cash, credit, or an AggieOne card. The Shepler Cafeteria, located between the two Shepler towers, is open to all students, staff, and faculty. This cafeteria operates on an "all you can eat" basis. Commuter meal plans are also available. The Aggie Books and Brew coffee shop operates in the atrium of the Eugene D. McMahon Library, providing drinks and snacks.

BOOKSTORE/POST OFFICE

The Cameron University Bookstore is conveniently located in the McMahon Centennial Complex. Here students will find their required course materials as well as a selection of recommended study aids, basic school supplies, educationally priced software, and electronic equipment.

In addition to textbooks, the bookstore carries a wide selection of clothing and gifts that students can purchase to show their school spirit. The bookstore also stocks a selection of trade books. Students will find a selection of candy/snacks and cold drinks for purchase as well.

Graduation regalia, class rings, diploma frames, and announcements are also available through the Cameron Bookstore. Special orders can also be placed at no additional charge. Students can shop the bookstore online as well.

The Post Office is located in the McMahon Centennial Complex inside the Bookstore. Patrons can purchase postage here as well as money orders and post outgoing mail and packages.

STUDENT ACCOUNTS

The Student Accounts office is located in the Administration Building. Student account specialists assist students with account information and payments, refunds, parking permits, and student ID cards. Faculty and staff ID cards are also issued by the Student Accounts office. Payments may be made online by electronic check/ACH, credit card, or debit card or in-person by cash, check, or credit/debit card

STUDENT WELLNESS CENTER

Cameron's Student Wellness Center, located on the first floor of North Shepler Tower offers free medical care to students for acute conditions, assessment and brief mental health counseling, monthly education programs, and interactive workshops. The Student Wellness Center is open Monday through Friday, 8am to 5pm for more information or to schedule and appointment. Students over age 18 that are actively enrolled on the Lawton campus are eligible for services.

HEALTH INSURANCE

The university recommends that all students acquire some form of health insurance to meet unexpected medical needs.

Please note that all international students attending Cameron are required to enroll in the Student Health Insurance Plan through Academic Health Plans. For information about this requirement or to request a waiver, please contact International Student Services (international@cameron.edu.)

CAMERON UNIVERSITY ALUMNI ASSOCIATION

The purpose of the Alumni Association is to cooperate with and assist in the promotion of the goals and purposes of Cameron University; to encourage a continuing and increasing interest in the university among graduates, former students, and friends; and to foster acquaintance and good fellowship through information, education, and service. Membership is open to anyone interested in supporting the association. Projects include reunions, alumni networking opportunities, and alumni/faculty awards. A membership drive supports scholarships and various other campus activities. Further information may be obtained by contacting the Office of Alumni Relations; (alumni@cameron.edu.)

GENERAL EDUCATION PURPOSE AND OUTCOMES

The General Education program at Cameron University is guided by OSRHE's requirements and is designed to be appropriate to CU's mission and educational offerings.

BACCALAUREATE, ASSOCIATE IN ARTS, AND ASSOCIATE IN SCIENCE PROGRAMS

Cameron University's baccalaureate, AA, and AS programs are designed to prepare students for professional success, responsible citizenship, life-long learning, and meaningful contributions to a rapidly changing world. A university degree should go beyond preparing graduates for a profession; it should transform their lives and their communities.

The General Education program at CU is a selection of courses designed to provide students with the common knowledge, intellectual concepts, breadth of skills, and attitudes that every college graduate with a baccalaureate, Associate in Arts, or Associate in Science degree should possess. By the time students complete the general education program for baccalaureate, AA and AS programs, they should have met all General Education Student Learning Outcomes.

General education courses help students develop the skills essential for Information Literacy, Diversity, Critical Thinking, Ethics, Aesthetics, Problem Solving, Communication-Oral, Communication-Written, and Wellness.

ASSOCIATE IN APPLIED SCIENCE PROGRAMS

By the time students complete the general education program for Associate in Applied Science programs, they should have met the Communication-Written, Critical Thinking, and Ethics General Education Student Learning Outcomes.

GENERAL EDUCATION REQUIREMENTS

BACCALAUREATE, ASSOCIATE IN ARTS, AND ASSOCIATE IN SCIENCE DEGREES (44-46 HOURS)

COMMUNICATION ..... 9 hours
ENGL 1113 and ENGL 1213
COMM 1113

MATHEMATICS ..... 3-5 hours
MATH 1413, MATH 1463, MATH 1513, MATH 1613, MATH 2215, MATH 2713, or STAT 1513

SCIENCE ..... 8-9 hours
One course must be taken from each of the following two categories, one course **must** be a laboratory science:

Biological Science (4 hours): BIOL 1004[L], BIOL 1114[L], BIOL 1214[L], BIOL 1364[L], or ENSC 2004

Physical Science (4-5 hours): ASTR 1104, CHEM 1004, CHEM 1105[L], CHEM 1364/1361[L], ESCI 1135[L], GEOG 1014, PHYS 1115[L], PHYS 2015[L], or PSCI 1054

[L]Designated laboratory science course.

AMERICAN HISTORY ..... 3 hours
HIST 1483 OR HIST 1493

POLITICAL SCIENCE ..... 3 hours
PS 1113

HUMANITIES ..... 6 hours
One course must be taken from each of the following two categories with no more than one course taken from the discipline in which the student is majoring:

Diversity (3 hours): Any 1000-level Foreign Language or Non-English language course, ARBC 1113, ARBC 1223, CHNS 1113, CHNS 1223, CMCH 1113, CMCH 1223, ENGL 2313[H], ENGL 2323[H], ENGL 2343[H], FNAR 1013[H], FREN 1113, FREN 1223, GEOG 2243, GERM 1113, GERM 1223, HIST 1113, HIST 1123, HIST 2113, HIST 2223, ITAL 1113, ITAL 1223, LATN 1113, LATN 1223, MUSC 1033[H], PHIL 1113, PRSN 1113, PRSN 1223, RUSN 1113, RUSN 1223, SOCI 3013, SPAN 1113, SPAN 1223, SWLI 1113, or SWLI 1223

Aesthetics (3 hours): ART 1013, ART 2613, ART 2623, ENGL 2013, ENGL 2053, ENGL 2313[H], ENGL 2323[H], ENGL 2343[H], FNAR 1013[H], MUSC 1013, MUSC 1023, MUSC 1033[H], MUSC 1413, or THTR 1103

[H]Courses listed in both categories may only be used to fulfill one category.

BEHAVIORAL SCIENCE ..... 3 hours
FAMS 1123, PSY 1113, or SOCI 1113

ECONOMICS ..... 3 hours
AGRC 2013, ECON 2003, ECON 2013, or GEOG 3023

HEALTH AND WELLNESS* ..... 4 hours
SES 2003, SES 2013, SES 2023, MSL 1112, any course with the following form: PE 1--1

**Requirement waived for students who are awarded credit based on one year of active full-time military service, completion of basic training, or successful completion of the ROTC program.*

GENERAL EDUCATION ELECTIVES (TO TOTAL AT LEAST 44 HOURS)**

***Must be selected from the above list of approved courses, exclusive of courses with the MSL or PE prefix.*

ASSOCIATE IN APPLIED SCIENCE DEGREE (18 HOURS)

Eighteen (18) hours of general education are required of each person who receives an Associate in Applied Science Degree from Cameron University.

UNIVERSITY REQUIREMENTS

UNIVERSITY SUCCESS

To better acquaint students with the educational and social environment of CU, provide the skills necessary for transition to university life, and prepare students for college success, all undergraduate students entering the university with fewer than 12 earned collegiate hours will be required to successfully complete UNIV 1001, Introduction to University Life.

COMPUTER LITERACY

All undergraduate degree programs require students to achieve a minimum level of computer literacy. The means by which students acquire or demonstrate such literacy varies among programs, but acceptable means include:

1. successfully completing a high school computer science course that meets the Oklahoma State Regents for Higher Education high school curricular requirements, or
2. satisfactorily completing a computer literacy assessment, or
3. successfully completing courses designated as program requirements.

Courses such as IT 1013 Introduction to Computer Information Systems, and MIS 2113 Fundamental MIS Tools and Skills typically satisfy computer literacy requirements. However, some programs require specific courses to fulfill the computer literacy requirement. Please see the program requirements for each major for details.

CAPSTONE EXPERIENCE

The baccalaureate undergraduate capstone experience is designed to bring reflection and focus to the whole of the university experience. It should encourage students to integrate and synthesize aspects of their chosen field of study with important concepts from related disciplines and provide resources for careers, professional programs, and graduate school programs. Assessment measures such as standardized tests or required key assignments may be required as part of the capstone experience.

Each department or program has designed the capstone experience for its majors to assist them in developing a broader understanding of the significance of the major within the framework of their overall undergraduate experience. This culminating experience should focus on some feature of the student's chosen field of study and should require the disciplined use of skills, methodology, and knowledge taught throughout the undergraduate curriculum.

Examples of possible capstone experiences include, but are not limited to, the following:

- A comprehensive examination.
- A senior seminar that requires a major project.
- An undergraduate thesis.
- A semester project that culminates in a paper, essay, presentation, or similar product.
- An internship to investigate a problem in the workplace, and a paper that asks students to analyze and evaluate the experience.
- A performance, show, or recital appropriate to the discipline, together with relevant supporting assignments.

Using one or more of the above components also allows departments to assess the effectiveness of their major programs and evaluate the learning of each student. All baccalaureate degree students must complete at least one credit hour in a capstone experience in their declared major. Please see the program requirements for each major for details.

INTERDISCIPLINARY STUDIES

ACADEMIC ADVISING CENTER

ADVISOR

Kensey Garrison–Acting Director, Academic Services

PROGRAMS OF STUDY

Degrees and Majors:

A.S. Interdisciplinary Studies
B.S. Interdisciplinary Studies

UNIVERSITY INTERDISCIPLINARY DEGREES

Interdisciplinary Studies degrees are customized to the needs of the individual student. As a result, students wishing to declare a major in Interdisciplinary Studies must take the following steps:

1. Contact the Interdisciplinary Studies Advisor in the Academic Advising Center to make an appointment and create a plan of study. Plans must be approved by the academic department for each area of option and the Advising Center designee.
2. Changes in the plan of study must be approved by the advisor and the Advising Center designee
3. 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.

Degree Requirements: Interdisciplinary Studies (365)–Associate in Science
Academic Advising Center
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (UNIV 2543)	Capstone Experience (UNIV 2543)

Option Requirements* (21 hours)	
Required Courses (3 hours)	**Primary and Secondary Disciplines (18 hours)**
UNIV 2543 IDS-AS Capstone Experience (SP) *FA=Fall; SP=Spring; SU=Summer*	**Primary Discipline (9 hours)** A minimum of 9 hours must be completed in the primary discipline. Only courses approved by the department chair of each discipline will meet this requirement. **Secondary Discipline (9 hours)** A minimum of 9 hours must be completed in the secondary discipline. Only courses approved by the department chair of each discipline will meet this requirement. **Courses selected from two disciplines which in their aggregate comprise a rational combination of skills and concepts.*
General Electives (To Complete 66 hours)	
Graduation Requirements	
Department Requirements Minimum 66 Total Credit Hours Minimum 15 Credit Hours in Residence at CU	Minimum 37 Liberal Arts & Science Credit Hours Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online

Degree Requirements: Interdisciplinary Studies (360)–Bachelor of Science
Academic Advising Center
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (UNIV 4543)	Capstone Experience (UNIV 4543)

Option Requirements* (51 hours)	
Required Courses (3 hours)	**Primary and Secondary Disciplines (48 hours)**
UNIV 4543 IDS-BS Capstone Experience (SP) *FA=Fall; SP=Spring; SU=Summer*	**Primary Discipline (30 hours)** A minimum of 30 hours must be completed in the primary discipline. Only courses approved by the department chair of each discipline will meet this requirement. **Secondary Discipline (18 hours)** A minimum of 18 hours must be completed in the secondary discipline. Only courses approved by the department chair of each discipline will meet this requirement. **Courses selected from two disciplines which in their aggregate comprise a rational combination of skills and concepts.*
General Electives (To Complete 124 hours)	

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Div Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

SCHOOL OF GRADUATE AND PROFESSIONAL STUDIES

ADMINISTRATION

Jennifer Dennis–Dean

DEPARTMENT OF BUSINESS
Krystal Brue–Chair

DEPARTMENT OF EDUCATION
Stacie Garrett–Chair

DEPARTMENT OF PSYCHOLOGY
Stephanie White–Chair

DEPARTMENT OF SOCIAL SCIENCES
Lance Janda–Chair

DEPARTMENT OF SPORTS AND EXERCISE SCIENCE
Kris Mahlock–Chair

MISSION STATEMENT

The mission of the School of Graduate and Professional Studies is to provide a diverse and dynamic student body the opportunity to acquire a wide range of knowledge and skills so they can contribute to their profession and enrich their lives.

GENERAL INFORMATION

The School provides undergraduate coursework in the fields of Business, Education, Organizational Leadership, Psychology, Social Sciences, and Sports and Exercise Science. These primary areas of study encompass several specialties. In addition to supporting general education preparation and undergraduate degrees, the School provides graduate degrees in Business, Education, and Behavioral Sciences. Several disciplines blend academics with field based and practical 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 BUSINESS

FACULTY

CHAIR–Krystal Brue, Professor
PROFESSORS–S. Hunt, A. Sukar, A. Walton
ASSOCIATE PROFESSORS–J. Masters, A. Soylu
ASSISTANT PROFESSORS–K. Hardin, M. Helm, L. Restivo
SENIOR INSTRUCTOR–B. Lonzanida
INSTRUCTORS–J. Ellis, J. Lawter

MISSION STATEMENT

The Department of Business exists to educate and prepare the diverse students it serves to become skilled professionals who add value to their organizations, their professions, and their communities. The Department strives to expand understanding of the effective and efficient operation of organizations and their dynamic environments. The Department creates a student-centered approach to lifelong learning as well as innovative and experiential business-based learning opportunities.

PROGRAMS OF STUDY

Degrees and Majors:

A.S. Business
B.Acc. Accounting
B.B.A. Business Administration with options in

- Finance
- General Business Administration
- Management
- Marketing

B.S. Organizational Leadership

- Business
- Criminal Justice
- Military Science
- Sociology
- Sports and Exercise Science
- Technology

M.B.A. Business Administration
M.S. Organizational Leadership

Certificate:

Banking and Finance (embedded in B.B.A.)

COURSE DESCRIPTIONS

Course descriptions for the following course prefixes offered in the department are located at the end of the catalog: Accounting (ACCT), Business (BUS), Economics (ECON), Finance (FIN), Management (MGMT), Marketing (MKTG), and Organizational Leadership (ORGL).

GENERAL INFORMATION

The Department of Business is a department of the School of Graduate and Professional Studies and is accredited by ACBSP, a specialized accreditation association for business education which embraces teaching excellence.

The Department of Business offers education and experiences in a variety of business disciplines at the Associate, Bachelor and Master level. Programs are continually updated to ensure students are receiving cutting edge business knowledge to prepare them for successful careers in the business and entrepreneurial arenas.

STUDENT ORGANIZATIONS

Accounting Club–The purpose of the accounting club is to encourage growth and academic excellence, as well as bring a closer relationship among those who are business and accounting majors. We sponsor field trips to various Accounting and Business offices; we closely work with the Oklahoma Society of CPAs and the Oklahoma Accountancy Board; we are actively involved in volunteer efforts, university projects, and various community services.

Cameron University Chapter of the Society for Human Resource Management (CU SHRM)–CU SHRM provides Cameron University students with opportunity to gain knowledge and insight into the effective management of human capital in the field of Human Resource Management through affiliation with Great Plains SHRM (the local SHRM professional chapter) and the SHRM National organization.

Delta Mu Delta–Delta Mu Delta is a national honor society which recognizes students who have excelled in the field of business administration. Membership in Delta Mu Delta is available to juniors, seniors and graduate students only.

Delta Sigma Pi–Delta Sigma Pi is a professional fraternity organized to foster the study of business in universities; to encourage scholarship, social activity and the association of students for their mutual advancement by research and practice; to promote closer affiliation between the commercial world and students of commerce, and to further a higher standard of commercial ethics and culture and the civic and commercial welfare of the community.

Degree Requirements: Business (505)–Associate in Science
School of Graduate and Professional Studies
Department of Business
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	PSY 1113 or SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1463, 1513, 1613, 2215, 2713	PS 1113	ECON 2013
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (MIS 2113)	Capstone Experience (BUS 2903)

Major Requirements (24 hours)	
Required Courses (21 hours)	**Additional Requirement (3 hours)**
ACCT 2013 Prin of Financial Accounting (FA, SP) ACCT 2023 Prin of Cost/Managerial Accounting (FA, SP) BUS 1113 Introduction to Business (FA, SP) BUS 2113 Business Communications (FA, SP) BUS 2903 Management Skills (FA, SP) ECON 2023 Principles of Microeconomics (FA, SP) FIN 2113 Personal Finance (FA, SP) *FA=Fall; SP=Spring; SU=Summer*	MIS 2113 Fundamental MIS Tools and Skills
General Electives (To Complete 69 hours)	
Graduation Requirements	
Department Requirements Minimum 15 Credit Hours in Residence at CU Minimum 37 Liberal Arts and Science Credit Hours Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online	

Degree Requirements: Accounting (305)–Bachelor of Accounting
School of Graduate and Professional Studies
Department of Business
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	PSY 1113 or SOCI 1113
Mathematics (3–5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1463, 1513, 1613, 2215, 2713	PS 1113	ECON 2013
Science* (8–9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (MIS 2113)	Capstone Experience (BUS 4633)

Major Requirements (72 hours)	
Core Courses (48 hours)	**Specialization (24 hours)**
ACCT 2013 Prin Financial Acct (FA, SP) ACCT 2023 Prin Cost/Managerial Acct (FA, SP) BUS 1113 Intro to Business (FA, SP) BUS 2113 Business Communication (FA, SP) BUS 2903 Management Skills (FA, SP) BUS 3213 Business Law I (FA, SP) BUS 4633 Business Policy (FA, SP) ECON 2023 Prin Microeconomics (FA, SP) FIN 2113 Personal Finance (FA, SP) FIN 3603 Prin Finance (FA, SP) MGMT 3013 Prin Management (FA, SP) MGMT 4053 Business, Ethics, and Society (FA, SP) MIS 2113 Fundamental MIS Tools and Skills (FA, SP) MIS 3013 Management Info Systems (FA, SP) MKTG 3413 Prin Marketing (FA, SP) STAT 2613 Business Statistics (FA, SP) *FA=Fall; SP=Spring; SU=Summer*	ACCT 3013 Intermediate Accounting I ACCT 3023 Intermediate Accounting II ACCT 3133 Cost Accounting ACCT 4013 Individual Income Tax ACCT 4213 Auditing ACCT 4513 Accounting Info Systems Upper Division ACCT Electives (6 hours)

General Electives (To Complete 124 hours)	
Graduation Requirements	
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 40 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU	Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Division Hours Completed at CU 15 of Last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online

Degree Requirements: Business Administration (320)–Bachelor of Business Administration
School of Graduate and Professional Studies
Department of Business
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	PSY 1113 or SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1463, 1513, 1613, 2215, 2713	PS 1113	ECON 2013
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (MIS 2113)	Capstone Experience (BUS 4633)

Major Requirements (63 hours)

Core Courses (48 hours)

ACCT 2013 Prin Financial Acct (FA, SP)
ACCT 2023 Prin Cost/Managerial Acct (FA, SP)
BUS 1113 Introduction to Business (FA, SP)
BUS 2113 Business Communication (FA, SP)
BUS 2903 Management Skills (FA, SP)
BUS 3213 Business Law I (FA, SP)
BUS 4633 Business Policy (FA, SP)
ECON 2023 Prin Microeconomics (FA, SP)
FIN 2113 Personal Finance (FA, SP)
FIN 3603 Prin Finance (FA, SP)
MGMT 3013 Prin Management (FA, SP)
MGMT 4053 Business, Ethics, and Society (FA, SP)
MIS 2113 Fundamental MIS Tools and Skills (FA, SP)
MIS 3013 Management Info Systems (FA, SP)
MKTG 3413 Prin Marketing (FA, SP)
STAT 2613 Business Statistics (FA, SP)

FA=Fall; SP=Spring; SU=Summer

Option (15 hours)

Finance
Required Courses (15 hours)
FIN/ECON 3313 Money and Banking
FIN 3623 Investments
FIN 4333 Financial Management
FIN 4453 Bond Analysis
Upper Division Finance (FIN) Electives (3 hours)

General Business Administration
Required Courses Upper Division Electives (15 hours)
3 credit hours of Accounting (ACCT)
3 credit hours of Business (BUS)
3 credit hours of Finance (FIN)
3 credit hours of Management (MGMT)
3 credit hours of Marketing (MKTG)

Management
Required Courses (15 hours)
MGMT 3513 Human Resource Management
MGMT 3613 Operations Management
MGMT 4013 Organizational Behavior
Upper-Division Management (MGMT) Electives (6 hours)

Marketing
Required Courses (15 hours)
MKTG 3423 Consumer Motivation and Behavior
MKTG 3433 Retailing
MKTG 4433 Advertising
MKTG 4443 Marketing Research
Upper-Division Marketing (MKTG) Electives (3 hours)

General Electives (To Complete 124 hours)

Graduation Requirements

Department Requirements
Minimum 124 Total Credit Hours
Minimum 40 Upper Division Credit Hours
Minimum 40 Liberal Arts & Science Credit Hours
Minimum 30 Credit Hours in Residence at CU
Minimum 60 Credit Hours at a 4-Year Institution
Minimum ½ of Major Upper Division Hours Completed at CU
15 of last 30 Credit Hours or ½ of Major Completed at CU
Retention GPA 2.0; Cameron GPA 2.0
Complete Graduation Application Online

Embedded Certificate Requirements: Banking and Finance (220)
(Embedded in Bachelor of Business Administration in Business Administration)
School of Graduate and Professional Studies
Department of Business
Catalog Year: 2025-2027

Embedded Certificate Requirements (15 hours)
ACCT 2013 Principles of Accounting (FA, SP)
ECON 2013 Principles of Macroeconomics (FA, SP)
ECON 2023 Principles of Microeconomics (FA, SP)
FIN 3313 Money & Banking (SP)
FIN 3603 Principles of Finance (FA, SP)
Graduation Requirements
Retention GPA 2.0
Cameron GPA 2.0
Minimum 4 hours completed at CU

Degree Requirements: Organizational Leadership (775)–Bachelor of Science
School of Graduate and Professional Studies
Department of Business
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (ORGL 3333)	Capstone Experience (ORGL 4553)

Major Requirements (42-48 hours)	
Required Courses (30 hours)	**Option (12-18 hours)**
ORGL 3113 Found of Org Ldrshp & Prsnl Devel (FA) ORGL 3223 Professional Communications (SP) ORGL 3333 Data Analysis and Interpretation (FA) ORGL 3443 Survey of Fiscal Management (SP) ORGL 4113 Ethics & Organizations (FA) ORGL 4213 Org Culture & Ldrshp (SP) ORGL 4313 Global Ldrshp & Diversity (FA) ORGL 4333 Ldrshp Theory & Practice (SP) ORGL 4443 Markets & Stakeholders (FA) ORGL 4553 Capstone (SP) *FA=Fall; SP=Spring; SU=Summer*	**Business** **Criminal Justice** **Military Science** **Sociology** **Sports and Exercise Science** **Technology**

Professional and Free Electives Requirements (38 hours)
Courses can include prior academic credit on transcript and/or up to 30 hours of extra institutional credit through CLEP, DSST, military or prior learning assessment (maximum of 15 hours in this category).
General Electives (To Complete 124 hours)

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Div Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Degree Requirements: Organizational Leadership (775)–Bachelor of Science (Cont'd)

Option (12-18 hours)

Business (12 hours)
Required Courses (12 hours)
ACCT 2013 Principles of Financial Accounting
ACCT 2023 Principles of Cost/Managerial Acct
BUS 2113 Business Communication
BUS 3213 Business Law I
BUS 3223 Business Law II
ECON 2013 Principles of Macroeconomics
ECON 2023 Principles of Microeconomics
FIN 2113 Personal Finance
FIN 3603 Principles of Finance
MGMT 3013 Principles of Management
MGMT 3513 Human Resource Management
MGMT 4013 Organizational Behavior
MKTG 3423 Consumer Motivation and Behavior
MKTG 3433 Retailing
MKTG 3533 Personal Selling

Criminal Justice (12 hours)
Required Courses (3 hours)
CJ 1013 Introduction to Criminal Justice
Electives (9 hours)
Choose 9 hours from the following:
CJ 2013 Introduction to Law Enforcement
CJ 2073 Introduction to Corrections
CJ 2113 Criminal Law
CJ 2233 American Courts
CJ 3013 Organized & White Collar Crime
CJ 3103 Theories of Crime
CJ 3133 Ethics in Criminal Justice
CJ 4033 Research Methods & Statistics
CJ 4133 Criminal Justice Administration
CJ 4491-3 Independent Study in Criminal Justice

Technology (12 hours)
Required courses (6 hours)
IT 3013 Technical Communication
IT 4143 Workplace Safety
Electives (6 hours)
Choose 6 hours from the following:
MIS 4433 Project Management
IT 3000-3 IT Workshop
IT 4001-6 IT Internship
IT 4033 Industrial Management Systems
TECH 4443 Technology Capstone

Sociology (12 hours)
Required Courses (3 hours)
SOCI 1113 Introduction to Sociology
Electives (9 hours)
Any SOCI courses

Sports and Exercise Science (12 hours)
Required Courses (6 hours)
SES 2043 Intro to Sports and Exercise Science
SES 3023 Care and Prevention of Athletic Injuries
Electives (6 hours)
SES 3053 Facility Management
SES 3103 Leadership and Coaching
SES 3113 Event Planning and Fundraising
SES 4033 Legal Aspects

Military Science
Contracted Cadets (18 hours):
(must fulfill the Minor in Military Science as listed below)
Required Courses (18 hours)
At least 18 credit hours from the following list of courses:
MSL 3011 Leadership & Problem Solving Lab
MSL 3013 Leadership & Problem Solving
MSL 3021 Leadership & Ethics Lab
MSL 3023 Leadership & Ethics
MSL 4004 Cadet Leader Course
MSL 4011 Leadership Challenges/Goal Setting Lab
MSL 4013 Leadership Challenges/Goal Setting
MSL 4021 Officership Lab
MSL 4023 Officership
HIST 3133 American Military History

Active Duty Students (12 hours):
Students will complete the following required courses, and select additional courses from the list below for a total of 12 hours. (Note: Students in this category will not receive a Minor in Military Science.)
Required Courses (5 hours)
MSL 2022 Leadership & Teamwork
HIST 3133 American Military History
Electives (7 hours)
Choose 7 hours from the following:
CJ 4023 Terrorism
COMM 2313 SmallGroup Communication
COMM 3353 Team Leadership Processes
GEOG 3213 World Regional Geography
MGMT 4013 Organizational Behavior
MSL 2021 Leadership & Teamwork Lab
PBRL 2113 Introduction to Public Relations

DEPARTMENT OF EDUCATION

FACULTY

CHAIR–Stacie Garrett, Associate Professor
PROFESSORS–J. Dennis, R. Hall, C. Keller, H. Rice, E. Richardson, M. Smith
ASSISTANT PROFESSORS–S. Phillips
INSTRUCTOR-J. Fishback

MISSION STATEMENT

The Department of Education believes that competent, caring, and committed educators are successful in their careers.

- Educators who are *competent* use pedagogical and content knowledge to support learning for all, provide instruction based on standards and student needs, and use assessment and strategies for active engagement so that all can learn.
- Educators who are *caring* are responsive to individual needs and create learning environments that promote positive social interactions and motivation.
- Educators who are *committed* collaborate with others by using effective communication skills while being reflective decision makers and lifelong learners who are willing to change in order to continuously improve.

We believe that all of these qualities are fostered through standards-based coursework with coordinated field experiences.

PROGRAMS OF STUDY

Degrees and Majors:

B.S. Early Childhood Education
B.S. Elementary Education
M.Ed. Education

- English
- Literacy
- School Counseling
- Special Education
- Teaching and Learning

M.Ed. Reading
M.S. Educational Leadership

COURSE DESCRIPTIONS

Course descriptions for the following course prefixes offered in the department are located at the end of the catalog: Child Development (CD), Early Childhood Education (ECE), Education (EDUC), Library Science (LIBS), , and Special Education (SPED).

GENERAL INFORMATION

The Department of Education is dedicated to producing COMPETENT, CARING, and COMMITTED educators who can successfully work with diverse students.

TEACHER EDUCATION

Teacher Education Programs at Cameron University are accredited by the Office of Educational Quality and Accountability (OEQA) and the Council for the Accreditation of Educator Preparation (CAEP). 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 upon meeting state requirements for certification.

NOTE: Rules and regulations governing teacher education established by the Oklahoma State Regents for Higher Education, Office of Educational Quality and Accountability, 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 University offers a Teacher Education program to prepare students to teach at PK-3 level in the schools of Oklahoma.

Early Childhood Education majors must demonstrate foreign language proficiency (listening and speaking) at the novice-high level. (Please contact department for details).

Elementary (1-8)

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.

Elementary Education majors must demonstrate foreign language proficiency (listening and speaking) at the novice-high level. (Please contact department for details).

Elementary–Secondary (PK-12)

Students may pursue a program of study in Music, which will allow them to be recommended for a teaching

license for the elementary-secondary levels. For a list of the required courses in this field 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. (Please contact department for details).

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: English and Social Studies.

Secondary Education majors must demonstrate foreign language proficiency (listening and speaking) at the novice-high level. (Please contact department for details).

Admission to Educator Preparation

Admission to educator preparation is achieved through a formal process. Requirements for admission to Educator Preparation are as follows:

a. Minimum retention GPA of 2.5
b. Final grade of C or better for ENGL 1113, ENGL 1213, COMM 1113, MATH 1413 or higher, HIST 1483/1493, PS 1113 and two humanities.
c. Final grade of C or better OR grade check of C or better while concurrently enrolled in EDUC 3003.
d. Final grade of C or better OR current enrollment in EDUC 3733, Biological or Physical Science.
e. Final grade of S for EDUC 1800.
f. Passing score on EDUC 3003 lesson plan rubric.
g. Application for Admission to Educator Preparation.
h. Two (2) satisfactory faculty recommendations (1 from general education and 1 from the Department of Education).
i. Satisfactory completion of entry interview.
j. Demonstration of general education knowledge and skills through one of the following:
    i. Possess a Baccalaureate degree from an accredited institution, or
    ii. Have a passing score on the Oklahoma General Education Test (OGET) of 240, or
    iii. Have a passing score on the ACT of 22 or better with the writing section included, or
    iv. Have a passing score on the SAT of 1120 including no less than the following scores on the essay section: five (5) on Reading, four (4) on Analysis, and five (5) on Writing, or
    v. Have a passing score on PRAXIS I of 150 on Math, 156 on Reading, and 162 or Writing, or
    vi. Have a GPA of 2.75 higher on at least 30 hours of general education courses including those required for Admission to Educator Preparation (see above).

STUDENT ORGANIZATIONS

Cameron University Council for Exceptional Children (CUCEC)–CUCEC is a student chapter of the Council for Exceptional Children. The dues include two journals. This group meets monthly and students attend one state meeting a year. In addition to the meetings there are activities with children with disabilities. Anyone who is interested is eligible for membership and encouraged to participate.

Students in Early Childhood Education (SECE)–SECE promotes the development of Early Childhood Education students and provides opportunities for those who are going to become educators of young children.

Oklahoma Aspiring Educators Association (OAEA)–OAEA promotes the development of professional attitudes among students preparing to enter the teaching profession.

Degree Requirements: Early Childhood Education (355)–Bachelor of Science
School of Graduate and Professional Studies
Department of Education
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113 (E); ENGL 1213 (E); COMM 1113 (E)	HIST 1483 or 1493 (SS)	PSY 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513 (M)	PS 1113 (SS)	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023 (SS)
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) (S) Physical Science (4-5 hours) (S) *One course must be a lab science.	Diversity: HIST 2113, 2223, PHIL 1113 Aesthetics: ART 1013, 2613, 2623, THTR 1103, FNAR 1013, MUSC 1013, 1023, 1033, 1413 *One course taken from each category.	SES 2013 and 1 additional hour chosen from: SES 2003, 2023, MSL 1112, or PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
Proficiency Requirements		
Foreign Language Proficiency (3-hour course* or Successful Proficiency Test) Education Four x Twelve Requirement–English, Math, Science, Social Studies (E, M, S, SS) (48 hours)		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (EDUC 3673)	Capstone Experience (EDUC 4313)

Major Requirements (74 hours)	
Required Core Courses (41 hours)	**Professional Education Courses (33 hours)**
ECE 2163 Hlth, Safety, & Nutrition for Young Child (SP, SU) ECE 3154 Mthds & Practicum in Early Childhood Educ (FA) ECE 3303 Home, School, & Community (FA, SU) ECE 4144 Mthds & Pract in Cognitive Development (SP) EDUC 3023 Creative Exper for ECE & Elem School (FA, SP) EDUC 3513 Teaching Primary Reading (FA, SP) EDUC 4423 Language Arts Methods (R) (Odd SP, SU) EDUC 4463 Mathematics Methods (R) (FA, SP) EDUC 4553 Diag & Remed of Reading Diff (R) (FA, SP) LIBS 3423 Children Literature (FA, SP, SU) MATH 1413 or above (M) (FA, SP) MATH 2353 or Elective (M) (FA, SP) MATH 2363 or Elective (M) (FA, SP) (R)Restricted to Teacher Ed students *FA=Fall; SP=Spring; SU=Summer*	ECE 4653 Assessment of Young Children (R) EDUC 1800 Educ Intro Seminar EDUC 3003 Intro to Teaching EDUC 3612 Classroom Management* (R) EDUC 3673 Media & Tech in Educ EDUC 3733 Developmental Psychology EDUC 3753 Educational Psychology (R) EDUC 4313 Pract in Assess. & Instruct (R) EDUC 4935 Clinical Exper in Teaching I* (R) EDUC 4945 Clinical Exper in Teaching II* (R) SPED 3103 The Exceptional Child *Should be taken in professional semester (R)Restricted to Teacher Ed students

Additional Requirements (6 hours)
Social Studies Elective (3 hours) and Science Elective (3 hours) (See advisor for list.)
General Electives (To Complete 124 hours)
Graduation Requirements
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 55 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Div Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online Complete Foreign Language Proficiency

Degree Requirements: Early Childhood Education (355)–Bachelor of Science (Cont'd)

Educator Preparation Admission Requirements
Minimum retention GPA of 2.5 Final grade of C or better for ENGL 1113, ENGL 1213, COMM 1113, MATH 1413 or higher, HIST 1483/1493, PS 1113 and two humanities. Final grade of C or better OR grade check of C or better while concurrently enrolled in EDUC 3003. Final grade of C or better OR current enrollment in EDUC 3733, Biological or Physical Science. Final grade of S for EDUC 1800. Passing score on EDUC 3003 lesson plan rubric. Application for Admission to Educator Preparation. Two (2) satisfactory faculty recommendations (1 from general education and 1 from the Department of Education). Satisfactory completion of entry interview. Demonstration of general education knowledge and skills through one of the following: - Possess a Baccalaureate degree from an accredited institution, or - Have a passing score on the Oklahoma General Education Test (OGET) of 240, or - Have a passing score on the ACT of 22 or better with the writing section included, or - Have a passing score on the SAT of 1120 including no less than the following scores on the essay section: five (5) on Reading, four (4) on Analysis, and five (5) on Writing, or - Have a passing score on PRAXIS I of 150 on Math, 156 on Reading, and 162 or Writing, or - Have a GPA of 2.75 or higher on at least 30 hours of general education courses including those required for Admission to Educator Preparation (see above).

Degree Requirements: Early Childhood Education (355)–Special Education–Bachelor of Science
School of Graduate and Professional Studies
Department of Education
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113 (E); ENGL 1213 (E); COMM 1113 (E)	HIST 1483 or 1493 (SS)	PSY 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, or 1513 (M)	PS 1113 (SS)	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023 (SS)
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) (S) Physical Science (4-5 hours) (S) *One course must be a lab science.	Diversity: HIST 2113, 2223, PHIL 1113 Aesthetics: ART 1013, 2613, 2623, THTR 1103, FNAR 1013, MUSC 1013, 1023, 1033, 1413 *One course taken from each category.	SES 2013 and 1 additional hour chosen from the following: SES 2003, 2023, MSL 1112, or PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
Proficiency Requirements		
Foreign Language Proficiency (3-hour course* or Successful Proficiency Test) Education Four x Twelve Requirement–English, Math, Science, Social Studies (E, M, S, SS) (48 hours)		
University Requirements		
UNIV 100(1 hour)	Computer Literacy–EDUC 3673	Capstone Experience–EDUC 4313
Major Requirements (89 hours)		
Required Core Courses (41 hours)	**Professional Ed Courses (33 hours)**	**Special Education Option (15 hours)**
ECE 2163 Hlth/Sfty/Ntr Chld (SP, SU) ECE 3154 Mthds/Practicum ECE (FA) ECE 3303 Home/Sch/Commun (FA, SU) ECE 4144 Mthd/Pract Cognit Devel (SP) EDUC 3023 Crt Exp ECE/El Sch (FA, SP) EDUC 3513 Tching Prim Read (FA, SP) EDUC 4423 Lng Art Mth(R)(Odd SP, SU) EDUC 4463 Math Mthd(R)(FA, SP) EDUC 4553 Dia/Rem Rd Diff(R) (FA, SP) LIBS 3423 Children's Lit (FA, SP, SU) MATH 1413 or above(M) (FA, SP) MATH 2353 or Elective(M) (FA, SP) MATH 2363 or Elective(M) (FA, SP) (R)Restricted to Teacher Ed students *FA=Fall; SP=Spring; SU=Summer*	ECE 4653 Assessment Young Child (R) EDUC 1800 Educ Intro Seminar EDUC 3003 Intro to Teaching EDUC 3612 Classroom Mgmt* (R) EDUC 3673 Media & Tech in Educ EDUC 3733 Developmental Psychology EDUC 3753 Educational Psychology (R) EDUC 4313 Pract in Assess/Instruct (R) EDUC 4935* Clinical Exp in Tching I (R) EDUC 4945* Clinical Exp in Tching II (R) SPED 3103 The Exceptional Child *Should be taken in professional semester (R)Restricted to Teacher Ed students	Students wishing to seek certification in Special Education may choose to take the following courses in addition to the required core and professional education courses: SPED 3203 Char of Exceptional Children SPED 3223 Assessment/Eval in Spec Ed SPED 3243 Behav Intervention & Mgmt SPED 3263 Foundations of Special Ed SPED 4413 Tch Stds w/Mild/Mod Disab
Additional Requirements (6 hours)		
Social Studies Elective (3 hours) and Science Elective (3 hours) (See advisor for list.)		
General Electives (To Complete 124-139 hours)		
Graduation Requirements		
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 55 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Div Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online Complete Foreign Language Proficiency		

Degree Requirements: Early Childhood Education (355)–Special Education–Bachelor of Science (Cont'd)

Educator Preparation Admission Requirements
Minimum retention GPA of 2.5 Final grade of C or better for ENGL 1113, ENGL 1213, COMM 1113, MATH 1413 or higher, HIST 1483/1493, PS 1113 and two humanities. Final grade of C or better OR grade check of C or better while concurrently enrolled in EDUC 3003. Final grade of C or better OR current enrollment in EDUC 3733, Biological or Physical Science. Final grade of S for EDUC 1800. Passing score on EDUC 3003 lesson plan rubric. Application for Admission to Educator Preparation. Two (2) satisfactory faculty recommendations (a from general education and 1 from the Department of Education). Satisfactory completion of entry interview. Demonstration of general education knowledge and skills through one of the following: - Possess a Baccalaureate degree from an accredited institution, or - Have a passing score on the Oklahoma General Education Test (OGET) of 240, or - Have a passing score on the ACT of 22 or better with the writing section included, or - Have a passing score on the SAT of 1120 including no less than the following scores on the essay section: five (5) on Reading, four (4) on Analysis, and five (5) on Writing, or - Have a passing score on PRAXIS I of 150 on Math, 156 on Reading, and 162 or Writing, or - Have a GPA of 2.75 or higher on at least 30 hours of general education courses including those required for Admission to Educator Preparation (see above).

Degree Requirements: Elementary Education (350)–Bachelor of Science
School of Graduate and Professional Studies
Department of Education
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113 (E); ENGL 1213 (E); COMM 1113 (E)	HIST 1483 or 1493 (SS)	PSY 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513 (M)	PS 1113 (SS)	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023 (SS)
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) (S) Physical Science (4-5 hours) (S) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2013 and 1 additional hour chosen from the following: SES 2003, 2023, MSL 1112, or PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
Proficiency Requirements		
Foreign Language Proficiency (3-hour course* or Successful Proficiency Test) Education Four x Twelve Requirement–English, Math, Science, Social Studies (E, M, S, SS) (48 hours)		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (EDUC 3673)	Capstone Experience (EDUC 4313)

Major Requirements (72 hours)	
Required Core Courses (36 hours)	**Professional Education Courses (36 hours)**
EDUC 3023 Creative Exper for ECE/Elem School (FA, SP)	EDUC 1800 Education Intro Seminar
EDUC 3513 Teaching Primary Reading (FA, SP)	EDUC 3003 Intro to Teaching
EDUC 3533 Teaching Interm/Middle School Reading (SP)	EDUC 3013 Cultural Foundations of Education
EDUC 4423 Language Arts Methods (R) (Odd SP, SU)	EDUC 3612 Classroom Management* (R)
EDUC 4443 Social Studies Methods (R) (FA)	EDUC 3673 Media & Tech in Educ
EDUC 4463 Mathematics Methods (R) (FA, SP)	EDUC 3733 Developmental Psychology
EDUC 4483 Science Methods (R) (SP, SU)	EDUC 3753 Educational Psychology (R)
EDUC 4553 Diag & Remed of Reading Diffic (R) (FA, SP)	EDUC 4313 Pract in Assess. & Instruct (R)
LIBS 3423 Children's Literature (FA, SP, SU)	EDUC 4653 Classroom Assessment (R)
MATH 1413 or above (M) (FA, SP)	EDUC 4935 Clinical Exper in Teaching I* (R)
MATH 2353 or Elective (M) (FA, SP)	EDUC 4945 Clinical Exper in Teaching II* (R)
MATH 2363 or Elective (M) (FA, SP)	SPED 3103 The Exceptional Child
(R)Restricted to Teacher Ed students	*Should be taken in professional semester
FA=Fall; SP=Spring; SU=Summer	(R)Restricted to Teacher Ed students

Additional Requirements (6 hours)
Social Studies Elective (3 hours) and Science Elective (3 hours) (See advisor for list.)
General Electives (To Complete 124 hours)
Graduation Requirements
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 55 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Div Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online Complete Foreign Language Proficiency

Degree Requirements: Elementary Education (350)–Bachelor of Science (Cont'd)

Educator Preparation Admission Requirements
Minimum retention GPA of 2.5 Final grade of C or better for ENGL 1113, ENGL 1213, COMM 1113, MATH 1413 or higher, HIST 1483/1493, PS 1113 and two humanities. Final grade of C or better OR grade check of C or better while concurrently enrolled in EDUC 3003. Final grade of C or better OR current enrollment in EDUC 3733, Biological or Physical Science. Final grade of S for EDUC 1800. Passing score on EDUC 3003 lesson plan rubric. Application for Admission to Educator Preparation. Two (2) satisfactory faculty recommendations (1 from general education and 1 from the Department of Education). Satisfactory completion of entry interview. Demonstration of general education knowledge and skills through one of the following: - Possess a Baccalaureate degree from an accredited institution, or - Have a passing score on the Oklahoma General Education Test (OGET) of 240, or - Have a passing score on the ACT of 22 or better with the writing section included, or - Have a passing score on the SAT of 1120 including no less than the following scores on the essay section: five (5) on Reading, four (4) on Analysis, and five (5) on Writing, or - Have a passing score on PRAXIS I of 150 on Math, 156 on Reading, and 162 or Writing, or - Have a GPA of 2.75 or higher on at least 30 hours of general education courses including those required for Admission to Educator Preparation (see above).

Degree Requirements: Elementary Education (350)–Special Education–Bachelor of Science
School of Graduate and Professional Studies
Department of Education
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113 (E); ENGL 1213 (E); COMM 1113 (E)	HIST 1483 or 1493 (SS)	PSY 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, or 1513 (M)	PS 1113 (SS)	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023 (SS)
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) (S) Physical Science (4-5 hours) (S) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2013 and 1 additional hour chosen from the following: SES 2003, 2023, MSL 1112, or PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
Proficiency Requirements		
Foreign Language Proficiency (3-hour course* or Successful Proficiency Test) Education Four x Twelve Requirement–English, Math, Science, Social Studies (E, M, S, SS) (48 hours)		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (EDUC 3673)	Capstone Experience (EDUC 4313)
Major Requirements (87 hours)		
Required Core Courses (36 hours)	**Professional Ed Courses (36 hours)**	**Special Education Option (15 hours)**
EDUC 3023 Crt Exp ECE/El Sch (FA, SP) EDUC 3513 Tching Prim Rdng (FA, SP) EDUC 3533 Tch Inter/Mid Sch Rd (SP) EDUC 4423 Lng Art Mtd (R)(Odd SP, SU) EDUC 4443 Social Studies Mtds (R) (FA) EDUC 4463 Math Mtds (R) (FA, SP) EDUC 4483 Sci Mtds (R) (FA, SP, SU) EDUC 4553 Di/Remd Rd Df (R) (FA, SP) LIBS 3423 Children's Lit (FA, SP, SU) MATH 1413 or above (M) (FA, SP) MATH 2353 or Elective (M) (FA, SP) MATH 2363 or Elective (M) (FA, SP) (R)Restricted to Teacher Ed students *FA=Fall; SP=Spring; SU=Summer*	EDUC 1800 Educ Intro Seminar EDUC 3003 Intro to Teaching EDUC 3013 Cultural Found of Educ EDUC 3612 Classroom Mgmt* (R) EDUC 3673 Media & Tech in Educ EDUC 3733 Developmental Psych EDUC 3753 Educational Psych (R) EDUC 4313 Pract Assess/Instruct (R) EDUC 4653 Classroom Assessment (R) EDUC 4935 Clinical Exp in Tching I* (R) EDUC 4945 Clinical Exp in Tching II* (R) SPED 3103 The Exceptional Child *Should be taken in professional semester (R)Restricted to Teacher Ed students	Students wishing to seek certification in Special Education may choose to take the following courses in addition to the required core and professional education courses: SPED 3203 Char of Exceptional Child SPED 3223 Assessment/Eval in Spec Ed SPED 3243 Behav Intervention & Mgmt SPED 3263 Foundations of Special Ed SPED 4413 Tch Stds w/Mild/Mod Disab
Additional Requirements (6 hours)		
Social Studies Elective (3 hours) and Science Elective (3 hours) (See advisor for list.)		
General Electives (To Complete 124-139 hours)		
Graduation Requirements		
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 55 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Div Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online Complete Foreign Language Proficiency		

Degree Requirements: Elementary Education (355)–Special Education–Bachelor of Science (Cont'd)

Educator Preparation Admission Requirements
Minimum retention GPA of 2.5 Final grade of C or better for ENGL 1113, ENGL 1213, COMM 1113, MATH 1413 or higher, HIST 1483/1493, PS 1113 and two humanities. Final grade of C or better OR grade check of C or better while concurrently enrolled in EDUC 3003. Final grade of C or better OR current enrollment in EDUC 3733, Biological or Physical Science. Final grade of S for EDUC 1800. Passing score on EDUC 3003 lesson plan rubric. Application for Admission to Educator Preparation. Two (2) satisfactory faculty recommendations (1 from general education and 1 from the Department of Education). Satisfactory completion of entry interview. Demonstration of general education knowledge and skills through one of the following: - Possess a Baccalaureate degree from an accredited institution, or - Have a passing score on the Oklahoma General Education Test (OGET) of 240, or - Have a passing score on the ACT of 22 or better with the writing section included, or - Have a passing score on the SAT of 1120 including no less than the following scores on the essay section: five (5) on Reading, four (4) on Analysis, and five (5) on Writing, or - Have a passing score on PRAXIS I of 150 on Math, 156 on Reading, and 162 or Writing, or - Have a GPA of 2.75 or higher on at least 30 hours of general education courses including those required for Admission to Educator Preparation (see above).

DEPARTMENT OF PSYCHOLOGY

FACULTY

CHAIR–Stephanie White, Assistant Professor
PROFESSORS–J. Geiger, J. Seger
ASSISTANT PROFESSORS-C. Frye, P. James, J. Williams
INSTRUCTORS–M. Culbert, E. Hilliard, C. Nunnally, P. Reimer-Law, C. Sanders,

MISSION STATEMENT

The mission of the Department of Psychology at Cameron University is to prepare the diverse student body for entry level and advanced positions in the field of psychology, family studies, research, and service; to provide education that is focused on the principles of psychology and counseling that apply to work, family and responsible citizenship; and to prepare students for further education in the field, licensure, or related careers to support the cultural life and economic development of the region.

PROGRAMS OF STUDY

Degrees and Majors:

B.S. Family and Child Studies
B.S. Psychology
M.A. Mental Health with options in
- Counseling
- Marriage and Family Therapy

M.S. Behavioral Science with option in
- General Psychology

Certificates:

Alcohol and Drug Counseling (embedded in M.A. Mental Health)
Early Childhood Administration (embedded in B.S. Family and Child Studies)

COURSE DESCRIPTIONS

Course descriptions for the following course prefixes offered in the department are located at the end of the catalog: Family and Child Studies (FAMS), Psychology (PSY), and University (UNIV).

GENERAL INFORMATION

Psychology is the scientific study of human and animal behavior. Psychologists are interested in such diverse areas as drug addiction, obesity, sexual behavior, attitudes toward smoking, learning, individual growth, and adjustment, motivation, aggression, the dynamics of group behavior, physical performance, dreaming, memory, psychological disorders, and counseling. Psychology is a diverse field with both scientific and professional aspects. As a science, psychology focuses on research: psychologist collect, quantify, analyze and interpret data describing human and animal behavior. As a profession, psychology focuses on the application of knowledge, skills and techniques to solve individual and social problems. Possible careers with a bachelor degree in Psychology include case manager, social worker, career counselor, rehabilitation specialist, and psychiatric technician.

Family and Child Studies is the scientific study of the dynamics within families and child development. Scholars in this field study topics such as child development, parenting styles, family relationships, child abuse and neglect, sibling dynamics, early childhood education, and the effects of family structure on children's well-being. The field of family studies encompasses both research and practical application, developing programs, interventions, and support systems that promote healthy family functioning and enhance the developmental outcomes for children. Possible careers for a bachelor degree in Family and Child Studies include parent education, early intervention specialist, childcare lead teacher or director, nonprofit coordinator or support roles, or continuing education into counseling or social work fields.

The Psychology Department at Cameron University is dedicated to preparing students for the professional world and for graduate school. We have high standards, and we work with our students to reach those standards. Students have the opportunity to work with faculty members to do research and possibly publish or present the research. Research interests of the faculty include family dynamics, general experimental psychology, developmental psychology, cognitive psychology, counseling psychology, and neuropsychology.

STUDENT ORGANIZATION

Psi Chi (Psychology)–Psi Chi is the national psychology honor society established to promote the field of psychology and to recognize students for their scholastic excellence in the field.

Psychology Club–Psychology Club is open to all majors. It promotes the study and application of psychology in various fields.

Degree Requirements: Family and Child Studies (356)–Bachelor of Science
School of Graduate and Professional Studies
Department of Psychology
Catalog Year: 2025–2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science–3 hours**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	PSY 1113
Mathematics–3-5 hours	**Political Science–3 hours**	**Economics–3 hours**
STAT 1513 (recommended), MATH 1413, 1463, 1513, 1613, 2215, 2713	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, any from the following: PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (IT 1013, MIS 2113)	Capstone Experience (FAMS 4702)

Major Requirements (56 hours)	
Required Courses (41 hours)	**Option (15 hours)**
ECE 2163 Health, Safety, Nutrition for Yng Child (SP[OL], SU[OL]) CD 1113 Child Growth and Development (FA[OL], SP[OL]) CD 1123 Intro to Family and Child Studies (FA[OL]) CD 3223 Child Guidance (FA[OL]) CD 3233 Emergent Literacy for Young Children (SP[OL]) ECE 3303 Home School& Community (FA[OL], SU[OL]) FAMS 1123 Family Relations (FA[OL], SP[OL]) FAMS 3153 Human Sexuality (FA[OL], SP[OL]) FAMS 3143 Parenthood Education (SP[OL]) FAMS 4143 Crisis Management and Resources (Odd FA[OL]) FAMS 4333 Current Issues in Family Diversity (Odd SP[HY]) FAMS 4702 Career Research/Prof Develop (FA[OL], SP[OL], SU[OL]) PSY 3363 Psych of Middle Childhood (FA[OL]) SPED 2103 Inclusive Environ: Educ Exceptional Child (SP[OL]) *FA=Fall; SP=Spring; SU=Summer; OL=Online; HY=Hybrid*	*Child Development Option (15 hours)* CD 1213 Curriculum and Environments CD 2223 Found and Current Issues in Early Childhood CD 4223 Admin and Supervision in Early Childhood CD 4333 Developmental Assessment and Observation ECE 3154 Mthds and Practicum in Early Childhood Ed ECE 4144 Mthds and Practicum in Cognitive Development EDUC 3023 Creative Experiences for ECE/EL Schools EDUC 3673 Media and Technology in Education LIBS 3423 Children's Literature *Family Studies Option (15 hours)* FAMS 4123 Marriage FAMS 4163 Healthy Aging FAMS 4173 Functional Family Systems FAMS 4903 Seminar in Family Science FAMS 4133 Military Families FAMS 4803 Family Life Education PSY 3373 Psych of Adolescence and Emerging Adulthood
General Electives (To Complete 124 hours)	
Graduation Requirements	
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 55 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU	Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Div Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online

Embedded Certificate Requirements: Early Childhood Administration (256)
(Embedded in Bachelor of Science in Family and Child Studies)
School of Graduate and Professional Studies
Department of Psychology
Catalog Year: 2025–2027

Embedded Certificate Requirements (24 hours)
Family and Child Studies Major Courses or Child Development Option Courses (15 hours)
CD 1113 Child Growth and Development
CD 1123 Intro to Family and Child Studies
CD 1213 Curriculum and Environments
CD 2223 Found and Current Issues in Early Childhood
CD 3223 Child Guidance
CD 3233 Emergent Literacy for Young Children
CD 4333 Developmental Assessment and Observation
ECE 2163 Health, Safety, Nutrition for Young Child
ECE 3154 Methods and Practicum in Early Childhood Education
ECE 3303 Home School and Community
ECE 4144 Methods and Practicum in Cognitive Development
EDUC 3023 Creative Experiences for ECE/EL Schools
Administration/Management (9 hours)
Required (3 hours)
CD 4223 Admin and Supervision in Early Childhood
Choose from two of the following:
ACCT 2013 Principles of Financial Accounting
BUS 1113 Intro to Business
BUS 2113 Business Communication
ECON 2013 Principles of Macroeconomics
ECON 2023 Principles of Microeconomics

Graduation Requirements
Retention GPA 2.0.
Cameron GPA 2.0.
Minimum 6 Credit Hours in Residence at CU.

Degree Requirements: Psychology (165)–Bachelor of Science
School of Graduate and Professional Studies
Department of Psychology
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science–3 hours**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	PSY 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, any from the following: PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (PSY 3543)	Capstone Experience (PSY 4433)

Major Requirements (42 hours)	
Required Courses (27 hours)	**Major Electives (15 hours)**
PSY 1113 General Psychology (FA, SP, SU) PSY 2113 History of Psychology (FA, SP, SU) PSY 3353 Lifespan Human Growth & Devel (FA, SP, SU) PSY 3413 Psychology of Learning (FA, SP, SU) PSY 3423 Applied Quantitative Methods (FA, SP) PSY 4363 Abnormal Psychology (FA, SP) PSY 4393 Personality (FA, SP) PSY 4423 Experimental Psychology (FA, SP) PSY 4433 Psychological Research* (FA, SP) *A grade of C or above is required in PSY 3423 and PSY 4423 to enroll in PSY 4433 *FA=Fall; SP=Spring; SU=Summer*	**Select from the following list with a minimum of 9 hours having a PSY prefix of 3000 or above:** FAMS 3153 Human Sexuality (FA, SP) PSY 2223 Applied Psychology** PSY 2373 Intro to Health Psychology** PSY 3313 Cognitive Psychology (FA, SP) PSY 3333 Counseling and Clinical Psychology (FA, SP) PSY 3363 Psy of Early & Middle Childhood (FA) **OR** PSY 3373 Psy of Adolescence & Emerging Adulthood (SP) PSY 3383 Social Psychology (FA, SP, SU) PSY 4313 Psychological Testing** PSY 4323 Sensation & Perception (Even FA) PSY 4443 Biopsychology (Odd FA, SP) ***See enrollment schedule or advisor for course rotation.*

Minor Requirements (18 hours)
A full list of available minors is available on the CU website.
General Elective (To Complete 124 hours)

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Div Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

DEPARTMENT OF SOCIAL SCIENCES

FACULTY

CHAIR–Lance Janda, Professor
PROFESSORS–D. Catterall, S. Janda, J. Metzger, E. Montalvo
ASSOCIATE PROFESSORS–M. Cretacci, S. Lee
SENIOR INSTRUCTORS–T. Childs, S. Hooper, R. Lowe
INSTRUCTOR-M. Greer

MISSION STATEMENT

The mission of Cameron University's Department of Social Sciences is to provide high quality instruction to students at the undergraduate level using a multi-disciplinary approach that emphasizes active learning, problem solving, and critical thinking.

PROGRAMS OF STUDY

Degrees and Majors:

A.S. Criminal Justice
B.A. History
B.A. Political Science
B.A. Social Studies Education
B.S. Criminal Justice
B.S. Sociology with options in

- General Sociology
- Human Services

Certificate:

Criminal Justice Essentials (Embedded in A.S.)

COURSE DESCRIPTIONS

Course descriptions for the following course prefixes offered in the department are located at the end of the catalog: Criminal Justice (CJ), Geography (GEOG), History (HIST), Philosophy (PHIL), Political Science (PS), and Sociology (SOCI).

GENERAL INFORMATION

The department is dedicated to excellence in teaching, scholarship, and service. We offer degrees and minors in Criminal Justice, Geography, History, the Humanities, Political Science, Pre-Law, Social Studies Education and Sociology, and a broad array of required and elective general education courses.

Our academic programs empower students to explore their interests, express their ideas, and experience the pride of uncovering new knowledge.

The department strives to develop students into scholars, mentors, and responsible citizens of their community, state and country who make a positive difference in society through their involvement in their particular field in the social sciences.

STUDENT ORGANIZATIONS

Alpha Phi Sigma–Alpha Phi Sigma recognizes academic excellence among students majoring in Criminal Justice. The goals of Alpha Phi Sigma are to honor and promote academic achievement, honor and promote academic achievement, community service, education leadership, and unity.

Criminal Justice Association–The Criminal Justice Association is dedicated to the furthering of professionalism and the fostering of assistance and understanding between the community and students/scholars in Criminal Justice.

History Club–The History Club is for any student who has an interest in history. The club's primary purpose is to promote intellectual improvement among students. The secondary purpose is to provide students with the opportunity to get to know other students and professors who are interested in the field through social gatherings and activities.

Phi Alpha Theta–Phi Alpha Theta, an international Historical Honor Society, promotes the study of history through the exchange of learning and ideas among historians, excellent teaching, and the encouragement and publication of research.

Pi Sigma Alpha–Pi Sigma Alpha is the national honor society for political science. It promotes curricular and extra-curricular activities and stimulates scholarship and intelligent interest in political science.

Degree Requirements: Criminal Justice (551)–Associate in Science
School of Graduate and Professional Studies
Department of Social Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science–3 hours**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483* or 1493*	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (IT 1013, MIS 2113)	
Major Requirements (24 hours)		
Required Courses (21 hours)	**Guided Electives (3 hours)**	
CJ 1013 Intro to Criminal Justice (FA^{OL}, SP^{OL}) CJ 2013 Intro to Law Enforcement (FA^{OL}, SP^{OL}) CJ 2073 Intro to Corrections (FA^{OL}, SP^{OL}) CJ 2113 Criminal Law (FA^{OL}, SP^{OL}) CJ 2233 American Courts (FA^{OL}, SP^{OL}) SOCI 1113 Introduction to Sociology (FA^{OL}, SP^{OL}, SU^{OL}) IT 1013 or MIS 2113 Intro to Computer Information Systems or Fundamental MIS Tools and Skills (FA, SP, SU) *FA=Fall; SP=Spring; SU=Summer; OL=Online*	Any additional CJ-prefix course	
General Electives (To Complete 69 hours)		
Graduation Requirements		
Department Requirements Minimum 69 Total Credit Hours Minimum 15 Credit Hours in Residence at CU Retention GPA 2.0 Cameron GPA 2.0 Complete Graduation Application Online		

Embedded Certificate Requirements: Criminal Justice Essentials (251)
(Embedded in Associate in Science in Criminal Justice)
School of Graduate and Professional Studies
Department of Social Sciences
Catalog Year: 2025–2027

Embedded Certificate Requirements (15 hours)
Required Courses (15 hours)
CJ 1013 Introduction to Criminal Justice (FA[OL], SP[OL])
CJ 2013 Introduction to Law Enforcement (FA[OL], SP[OL])
CJ 2073 Introduction to Corrections (FA[OL], SP[OL])
CJ 2113 Criminal Law (FA[OL], SP[OL])
CJ 2233 American Courts (FA[OL], SP[OL])
FA=Fall; SP=Spring; SU=Summer; OL=Online
Graduation Requirements
Retention GPA 2.0. Cameron GPA 2.0. Minimum 4 Credit Hours in Residence at CU.

Degree Requirements: History (130)–Bachelor of Arts
School of Graduate and Professional Studies
Department of Social Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483* or 1493* *Both must be taken; one for Gen Ed and one for the major.	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (HIST 3583)	Capstone Experience (HIST 4790)

Major Requirements (42 hours)	
Required Courses (18 hours)	**U.S. History Upper Division Electives (12 hours)**
HIST 1113 Early World History (FA^{OL}) HIST 1123 Modern World History (SP) HIST 1483 or 1493 U.S. Hist to **OR** since 1865*(FA^{OL}, SP^{OL}) HIST 2113 Western Civilization I (FA^{OL}) HIST 3583 Historical Research & Writing**(FA^{OL}) HIST 2223 Western Civilization II (SP^{OL}) HIST 4790 Senior History Capstone***(Even SP^{OL}) *Both must be taken: one for Gen Ed and one for the major. **A grade of C" or better is required for graduation. *FA=Fall; SP=Spring; SU=Summer; OL=Online*	Please see next page for elective choices. U.S. History to 1865 (3 hours) U.S. History since 1865 (3 hours) U.S. History Surveys/Oklahoma History (3 hours) Internship or Additional U.S. History (3 hours) **Non-U.S. History Upper Division Electives (9 hours)** Please see next page for elective choices. Pre-Modern Non-U.S. History (3 hours) Modern Non-U.S. History (3 hours) Additional Non-U.S. History (3 hours) **General History Upper Division Elective (3 hours)** Any upper division HIST course (including HIST 4773)

Minor Requirements (18 hours)
A full list of available minors is available on the CU website.
General Electives (To Complete 124 hours)

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Div Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 80 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Degree Requirements: History (130)–Bachelor of Arts (Cont'd)

U.S. History/Non-U.S. History Upper Division Electives (24 hours)

U.S. History Upper Division Electives (12 hours)

U.S. History to 1865 (3 hours)
HIST 4243 American Colonial History
HIST 4253 The Amer Revolution & Early National Period
HIST 4273 The Age of Jackson/Amer Expansion, 1815-48
HIST 4283 The Civil War & Reconstruction 1848-77*

U.S. History since 1865 (3 hours)
HIST 4283 The Civil War & Reconstruction 1848-77*
HIST 4293 The Gilded Age & Progressive Era 1877-1920
HIST 4313 War & Depression 1917-45
HIST 4323 Cold War America, 1945-1991

U.S. History Surveys/Oklahoma History (3 hours)
HIST 3043 Oklahoma History
HIST 3133 American Military History
HIST 4123 American Women and Politics

Internship or Additional U.S. History (3 hours)
Or one additional course from U.S. History to 1865 or U.S. History since 1865 or U.S. History/Surveys/Oklahoma History categories.
HIST 3391-3 Independent Study
HIST 3483 Public History Internship
HIST 4961-3 Selected Topics in United States History
(*NOTE: HIST 4283 may only be counted once.)

Non-U.S. History Upper Division Electives (9 hours)

Pre-Modern Non-U.S. History (3 hours)
HIST 3033 Race & Atlantic, 1400-1850
HIST 3123 The Crusades, 1095-1798
HIST 4353 Frontier Europe, 1300-1800
HIST 4413 Religion/Magic in Early Mod Europe, 1400-1650
HIST 4473 Heroes & Villains of French Revol, 1781-1815
HIST 4971-3 Selected Topics in European & World History

Modern Non-U.S. History (3 hours)
HIST 3243 Britain Since 1689
HIST 4373 Europe 1789-1914
HIST 4443 20th Century European History
HIST 4971-3 Selected Topics in European & World History

Additional Non-U.S. History (3 hours)
Or one additional course from Pre-Modern Non-U.S. History or Modern Non-U.S. History categories.
HIST 3391-3 Independent Study
HIST 4971-3 Selected Topics in European & World History

General History Upper Division Elective (3 hours)
Any upper division HIST course, including HIST 4773 Methods of Teaching Social Studies.

Degree Requirements: Political Science (162)–Bachelor of Arts
School of Graduate and Professional Studies
Department of Social Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (PS 2113)	Capstone Experience (PS 4683)
Major Requirements (39 hours)		
Required Courses (6 hours)		
PS 2113 Concepts of Political Science (Odd FA) PS 4683 Academic Research in Political Science (Odd SP) *FA=Fall; SP=Spring; SU=Summer*		
Electives (33 hours)		
Choose from the list below: PS 2023 State & Local Government PS 2793 Research Methods in Political Science PS 3013 Political Parties/Interest Grps PS 3023 Public Opinion PS 3033 Introduction to International Relations PS 3043 The Media in American Politics PS 3113 Public Administration and Policy PS 3213 Global Political Economy PS 3333 International Security PS 3483 The American Presidency PS 3513 The Legislative Process PS 3603 Introduction to Political Thought PS 3633 American Political Thought PS 3721-3 Internship in Political Science PS 3813 Constitutional Law and Government: The American Experience PS 4023 ST: World Regional Politics PS 4053 U.S. Foreign Policy PS 4253 The Judicial Process PS 4491-3 Selected Topics in Political Science PS 4591-3 Independent Study Political Science **PS 4491-3, PS 4591-3 may each be taken for a maximum of 6 hours.*		
Minor Requirements (18 hours)		
A full list of available minors is available on the CU website.		
General Electives (To Complete 124 hours)		
Graduation Requirements		
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 80 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU		Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Div Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online

Degree Requirements: Social Studies Education (135)–Bachelor of Arts
School of Graduate and Professional Studies
Department of Social Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483	PSY 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	ECON 2013
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	HIST 2113 (3 hours) Aesthetics (3 hours) *See Gen Ed requirements for list.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 100 (1 hour)	Computer Literacy (EDUC 3673)	Capstone Experience (HIST 4773)

Major Requirements (78 hours)	
Major Core Requirements (45 hours)	**Required Education Courses (33 hours)**
History (30 hours) HIST 1113 Early World History (FA[OL]) HIST 1123 Modern World History (SP[OL]) HIST 1493 U.S. History since 1865 (FA[OL], SP[OL]) HIST 2223 Western Civilization II (SP[OL]) HIST 3043 Oklahoma History (SP) HIST 3583 Historical Research & Writing (FA) HIST 4773 Methods of Teaching Social Studies (FA) U.S. History Electives (6 hours at 3000+ level) (FA, SP) Non-U.S. History Electives (3 hours at 3000+ level) (FA, SP) **Political Science (3 hours)** Political Science Electives (3 hours at 2000+ level) (FA, SP) **Economics (3 hours)** ECON 2023 Prin of Microecon (FA, SP) **OR** GEOG 3023 Economic Geography (FA[OL], SP[OL]) **Geography (6 hours)** GEOG 2243 Human Geography (FA[OL]) GEOG 3213 World Regional Geography (SP[OL]) **Social Studies (3 hours)** SOCI 1113 Introductory Sociology (FA[OL], SP[OL]) *FA=Fall; SP=Spring; SU=Summer; OL=Online*	EDUC 1800 Educ Intro Seminar EDUC 3003 Intro to Teaching EDUC 3612 Classroom Management* EDUC 3673 Media & Tech in Educ EDUC 3733 Developmental Psychology EDUC 3753 Educational Psychology(R) EDUC 4313 Practicum in Assess. & Instruction(R) EDUC 4653 Classroom Assessment(R) EDUC 4935 Clinical Exper in Teaching I*(R) EDUC 4945 Clinical Exper in Teaching II*(R) SPED 3103 The Exceptional Child *Should be taken in professional semester (R)Restricted to Teacher Ed students
NOTE: A grade of "C" or better is required in all Required Major Core & Education Courses.	
General Electives (To Complete 124 hours)	

Graduation Requirements
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 55 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Div Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online Complete Foreign Language Proficiency

Degree Requirements: Social Studies Education (135)– Bachelor of Arts (Cont'd)

Educator Preparation Admission Requirements
Minimum retention GPA of 2.5 Final grade of C or better for ENGL 1113, ENGL 1213, COMM 1113, MATH 1413 or higher, HIST 1483/1493, PS 1113 and two humanities. Final grade of C or better OR grade check of C or better while concurrently enrolled in EDUC 3003. Final grade of C or better OR current enrollment in EDUC 3733, Biological or Physical Science. Final grade of S for EDUC 1800. Passing score on EDUC 3003 lesson plan rubric. Application for Admission to Educator Preparation. Two (2) satisfactory faculty recommendations (1 from general education and 1 from the Department of Education). Satisfactory completion of entry interview. Demonstration of general education knowledge and skills through one of the following: - Possess a Baccalaureate degree from an accredited institution, or - Have a passing score on the Oklahoma General Education Test (OGET) of 240, or - Have a passing score on the ACT of 22 or better with the writing section included, or - Have a passing score on the SAT of 1120 including no less than the following scores on the essay section: five (5) on Reading, four (4) on Analysis, and five (5) on Writing, or - Have a passing score on PRAXIS I of 150 on Math, 156 on Reading, and 162 or Writing, or - Have a GPA of 2.75 or higher on at least 30 hours of general education courses including those required for Admission to Educator Preparation (see above).

Degree Requirements: Criminal Justice (580)–Bachelor of Science
School of Graduate and Professional Studies
Department of Social Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 100 (1 hour)	Computer Literacy (IT 1013, MIS 2113)	Capstone Experience (CJ 4913)

Major Requirements (42 hours)	
Required Core Courses (33 hours)	**Guided Electives (9 hours)**
CJ 1013 Intro to Criminal Justice (FA[OL], SP[OL]) CJ 2013 Intro to Law Enforcement (FA[OL], SP[OL]) CJ 2073 Intro to Corrections (FA[OL], SP[OL]) CJ 2113 Criminal Law (FA[OL], SP[OL]) CJ 2233 American Courts (FA[OL], SP[OL]) CJ 3003 Juvenile Justice System (FA[OL], SP[OL]) CJ 3103 Theories of Crime (FA[OL], SP[OL]) CJ 3133 Ethics in Criminal Justice (FA[OL]) CJ 4033 Research Methods & Statistics (FA[OL]) CJ 4133 Criminal Justice Administration (FA[OL], SP[OL]) CJ 4913 Criminal Justice Capstone (SP[OL]) *FA=Fall; SP=Spring; SU=Summer; OL=Online*	CJ 3013 Organized and White Collar Crime CJ 3023 Criminal Justice & Film CJ 3033 Cybercrime CJ 3063 Criminal Evidence and Procedures[OL] CJ 4023 Homeland Security[OL] CJ 4143 Sexual Abuse & the CJ System CJ 4153 Death Penalty[OL] CJ 4491-3 Selected Topics in Criminal Justice *OL=Online*

Minor Requirements (18 hours)
An AAS, AA, or AS in Criminal Justice or an equivalent Associate degree may be used to satisfy the requirements for a minor. Otherwise, courses used to satisfy requirements may not be used to satisfy minor requirements. A full list of available minors is available on the CU website.
General Electives (To Complete 124 hours)

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Div Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Degree Requirements: Sociology (180)–Bachelor of Science
School of Graduate and Professional Studies
Department of Social Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (IT 1013)	Capstone Experience (SOCI 4903)

Major Requirements (39 hours)	
Required Courses (15 hours)	**Option (24 hours)**
SOCI 1113 Intro Sociology (FA[OL], SP[OL]) SOCI 3123 Sociological Theory (Odd SP[OL]) SOCI 3133 Sociological Research Methods (Odd SP) SOCI 4213 Social Stratification (Even SP[OL]) SOCI 4903 Sociology Capstone (Even SP) *FA=Fall; SP=Spring; SU=Summer; OL=Online*	**General Sociology Option (24 hours)** *Upper or Lower Division SOCI courses (24 hours)** *No more than 6 hours may be lower division. **Human Services Option (24 hours)** *Required Courses (12 hours)* SOCI 2513 Introduction to Social Work SOCI 3013 Race and Ethnic Relations SOCI 3403 Sociology Of The Family[OL] SOCI 3513 Introduction to Social Welfare & Human Services *Electives (12 hours)* Choose from: SOCI 2023 Social Problems[OL] SOCI 3003 Deviant Behavior[OL] SOCI 3343 Political Sociology SOCI 3991-3 Internship in Sociology SOCI 4013 Juvenile Delinquency[OL] SOCI 4403 Family Violence[OL] *OL=Online*

Minor Requirements (18 hours)
A full list of available minors is available on the CU website.
General Electives (To Complete 124 hours)

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Div Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

DEPARTMENT OF SPORTS AND EXERCISE SCIENCE

FACULTY

CHAIR–Kris Mahlock, Associate Professor
ASSOCIATE PROFESSOR- M. Thacker
ASSISTANT PROFESSORS–T. Chambers
INSTRUCTOR–B. Hughes

MISSION STATEMENT

The mission of the Department of Sports and Exercise Science at Cameron University is to prepare students for successful careers in corporate, medical, and/or community-based settings that embrace lifetime health and wellness of its constituents.

PROGRAM OF STUDY

Degrees and Majors:

B.S. Sports and Exercise Science

Certificate:

Coaching and Teaching (Embedded in B.S.)

COURSE DESCRIPTIONS

Course descriptions for the following course prefixes offered in the department are located at the end of the catalog: Physical Education Activity (PE), and Sports and Exercise Science (SES).

GENERAL INFORMATION

Our undergraduate program offers a mixture of academic coursework and fieldwork opportunities that encompass the exercise science discipline. Emphasis of preparation includes placement of the student 'early on' within the real-world setting. To achieve this outcome, our commitment relies on the ability to collaborate with community-based businesses/school sites and surrounding institutions with the intent to build upon the student's unique skill set throughout the degree program.

Students who are interested in pursuing a BS in Sports and Exercise Science acquire a strong foundation in science-based curriculum that integrates research, education, and practical application within a variety of contexts to enhance personal fitness, health, and sport performance.

CAREERS AND FIELDS OF STUDY

Common fields of study include: Teaching, Coach/Scout, Fitness Trainer/Instructor, Health Educator, Recreation, or Accredited Certifications.

For students who are interested in becoming a physical therapist assistant, the Sports and Exercise Science curriculum includes all prerequisite courses required by Physical Therapy Assistant (PTA) Programs in the state of Oklahoma.

Earning a Bachelor's Degree in Sports and Exercise Science provides a solid foundation for students who are interested in pursuing professional degrees in the following health-related disciplines: Registered Nurse, Dietitian, Chiropractor, Athletic Trainer, Exercise Physiologist, Occupational Therapist, Physical Therapist, Physician Assistant, Prosthetics and Orthotics Specialist, Recreational Therapist, or Sports Psychologist.

Degree Requirements: Sports and Exercise Science (370)–Bachelor of Science
School of Graduate and Professional Studies
Department of Sports and Exercise Science
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	PSY 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (IT 1013, MIS 2113)	Capstone Experience (SES 4053)

Major Requirements (45 hours)	
Required Core Courses* (45 hours*)	
SES 2023 Nutrition (FA[OL], SP[OL], SU[OL])	SES 3053 Facility Management (FA, SP[OL])
SES 2033 First Aid (FA[OL], SP, SU[OL])	SES 4003 Motor Learning (FA, SP[OL])
SES 2043 Intro to Sports & Exercise Science (FA, SP[OL])	SES 4013 Physiology of Exercise Lab (FA, SP[OL])
SES 3003 Sports Nutrition (FA[OL], SP)	SES 4023 Exercise Prescription (FA[OL], SP)
SES 3013 Applied Anatomy & Kinesiology (FA[OL], SP)	SES 4033 Legal Aspects (FA, SP[OL])
SES 3023 Care & Prevention of Athletic Injuries (FA, SP[OL])	SES 4043 Research Methods (FA, SP[OL])
SES 3033 Physiology of Exercise (FA[OL], SP)	SES 4053 Practicum (FA[OL], SP[OL])
SES 3043 Biomechanics (FA[OL], SP)	
FA=Fall; SP=Spring; SU=Summer; OL=Online	
Guided Electives* (15 hours)	
Select from the following list:	
SES 2003 Health	SES 3113 Event Planning & Fundraising
SES 2013 Wellness	SES 3123 Sport Psychology
SES 3063 Health Coaching	SES 3131 Special Studies
SES 3073 Recreation for Special Populations	SES 3132 Special Studies
SES 3083 Community Recreation Programs	SES 3133 Special Studies
SES 3093 General Medical Conditions	SES 3143 Personal Training
SES 3103 Leadership & Coaching	SES 3153 Strength Training
**A grade of C or better is required in all Major Core and Guided Elective Courses.*	
General Electives (To Complete 124 hours)	
Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Div Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Embedded Certificate Requirements: Coaching and Teaching (270)
(Embedded in Bachelor of Science in Sports and Exercise Science)
School of Graduate and Professional Studies
Department of Sports and Exercise Science
Catalog Year: 2025-2027

Embedded Certificate Requirements (15 hours)
Required Courses (15 hours)*
SES 2033 First Aid
SES 3023 Care and Prevention of Athletic Injuries
SES 3103 Leadership and Coaching
EDUC 3673 Media and Technology in Education
EDUC 4893 Methods and Management of Teaching
NOTE: A grade of "C" or better is required for all courses for this certificate.
Graduation Requirements
Retention GPA 2.0. Cameron GPA 2.0. Minimum 4 hours completed in Residence at CU.

SCHOOL OF ARTS AND SCIENCES

ADMINISTRATION

Jennifer Dennis- Dean

DEPARTMENT OF AGRICULTURE, BIOLOGY, AND HEALTH SCIENCES
Matt Van Sant–Chair

DEPARTMENT OF ART, MUSIC, AND THEATRE ARTS
Kirsten Underwood–Chair

DEPARTMENT OF CHEMISTRY, PHYSICS, AND ENGINEERING
Kyle Moore–Chair

DEPARTMENT OF COMMUNICATION, ENGLISH, AND FOREIGN LANGUAGES
Carie Schneider–Chair

DEPARTMENT OF COMPUTING AND MATHEMATICAL SCIENCES
Muhammad Javed–Chair

DEPARTMENT OF MILITARY SCIENCE
MAJ Christopher McWhirter–Chair

MISSION STATEMENT

The mission of the School of Arts and Sciences is to offer quality associate and baccalaureate programs in the fine arts, humanities, and sciences. The School also plays an important role in general education. In our programs and course offerings, the School of Arts and Sciences fosters a student-centered academic environment, in keeping with the mission of the university, and is dedicated to guiding students to the highest possible standard of achievement.

GENERAL INFORMATION

The School of Arts and Sciences offers degree programs in Art, Music and Theatre Arts; Agriculture, Biology and Health Sciences; Communication, English and Foreign Languages; Chemistry, Physics, and Engineering; Computing and Mathematical Sciences, and a minor in Military Science.

Our faculty members believe strongly in creating student-centered learning environments and engaging students in exploration and discovery. We engage students in undergraduate research, internships, and special programs that extend beyond the traditional classroom.

We take pride in being innovative and creative teachers and scholars in guiding and mentoring students to the highest possible standards of academic achievement. We prepare students for a lifetime of learning and contributing in professional and cultural life. We have within our school several state-of-the-art facilities with particularly well-equipped labs in the Sciences, including our Gross Anatomy lab, and the broadcast and newsroom facilities in the Academic Commons.

Each year we present a broad array of university events such as theatre productions, art exhibits concerts, public lectures, readings, film showings and other events to which we invite the campus community and the public. Faculty in the school are also advisors for a wide range of student organizations. We feel strongly that important aspects of a university education take place outside the classroom. We urge all students to be full participants in campus life and to take advantage of the activities and organizations available on our campus.

Please contact any of the departments in the School of Arts and Sciences for additional information regarding our degree programs. We wish you every success and are here to guide and to help as you pursue your education.

DEPARTMENT OF AGRICULTURE, BIOLOGY, AND HEALTH SCIENCES

FACULTY

CHAIR–Matt Van Sant, Associate Professor
PROFESSOR-M. Husak
ASSOCIATE PROFESSORS–D. Lee
ASSISTANT PROFESSORS–
INSTRUCTORS–T. Holley, B. Kuehne, P. McAnerney, D. Ousley, K. Smith, C. Sumpter, D. Wahweah, D. Winters

MISSION STATEMENT

The mission of Cameron University's Department of Agriculture, Biology and Health Sciences is to provide high quality instruction to students at the undergraduate level using a multi-disciplinary approach that emphasizes active learning, problem solving, and critical thinking.

The department is committed to research and scholarly activities that advance, integrate, broaden, and communicate knowledge to our students and colleagues in the natural sciences. Our vision is to achieve excellence in education through creative use of traditional and innovative instructional methods, technology, and research. The department strives to develop students into scholars, mentors, and responsible citizens of their community, state and country who make a positive difference in society by enhancing agricultural productivity, environmental sustainability, and proper management of natural resources. Our faculty participates in outreach to the state and nation through services to the university community, to the public, to governmental and industrial sectors, and to professional societies.

PROGRAMS OF STUDY

Degrees and Majors:

A.A.S Radiologic Technology
A.A.S. Respiratory Care
A.S. Allied Health Sciences
B.S. Agriculture with options in

- Agribusiness Management
- Agronomy
- Animal Science
- General Agriculture

B.S. Biology with options in

- Cellular and Molecular Biology
- Organismal Biology
- Medical Laboratory Science

GENERAL INFORMATION

The department offers a wide range of baccalaureate and associate degrees in undergraduate programs that prepare students for immediate entry into the workforce, as well as preparation for pursuing the graduate degrees that are required by many careers in advanced professions.

COURSE DESCRIPTIONS

Course descriptions for the following prefixes offered in the department are located at the end of the catalog: Agriculture (AGRC), Agronomy (AGRN), Allied Health Sciences (AHS), Animal Science (ANIM), Biology (BIOL), Earth Science (ESCI), Environmental Science (ENSC), Medical Laboratory Science (MLS), Radiologic Technology (RAD), and Respiratory Care (RESP).

POSITION STATEMENT ON EVOLUTION

Evolution is the generation-to-generation change in the frequency of alleles in the gene pool and the division of populations into lineages. That this occurs is a fact. Evidence for the modes and tempos of evolution coming from laboratory genetics, population genetics, natural history, systematics, and paleontology, is so overwhelming that no scientific discipline refutes evolution. Understanding this concept is crucial to understanding all disciplines of biology including but not limited to ecology and evolutionary biology, cellular and molecular biology, and medicine. Therefore, the Biological Sciences program integrates evolution into all of its courses and does not teach non-scientific concepts based on mythology or literature.

STUDENT ORGANIZATIONS

Aggie Club–The Cameron University Aggie Club, built on tradition, hard work, fun and friendliness, has been a part of the university from its beginnings and has gained recognition as an outstanding organization that provides a wide variety of events that are fun for everyone.

Biology Club–The Biology Club provides fellowship for biology students and other individuals interested in biological sciences.

Beta Beta Beta–Tri Beta is an honor society which provides fellowship for biology students and promotes interest in graduate and professional studies.

Health Professions Society (HPS)–Health Professions Society (HPS) promotes student enrichment for all Cameron University students interested in pursuing a health career.

Pre-Nursing Club–The Pre-Nursing Club provides students with the opportunity to learn about nursing-related instruction, degree program requirements, application procedures and dates, and the nursing profession. The club exists to support its members in achieving their career goals in the field of nursing through a variety of informational events and fun activities.

Degree Requirements: Radiologic Technology (585)–Associate in Applied Science
School of Arts and Sciences
Department of Agriculture, Biology, and Health Sciences
Catalog Year: 2025-2027

General Education Requirements (19 hours)
Required Courses–19 hours
BIOL 1214/1214L Human Biology/Lab COMM 1113 Principles of Communication ENGL 1113 English Composition I MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513 HIST 1483 or 1493 U.S. History To or Since 1865 PS 1113 American Federal Government
University Requirements
UNIV 1001–1 hour Computer Literacy–IT 1013 or MIS 2113
Major Requirements (61 hours)
NOTE: All Courses Listed Below are Required
Technical-Occupational Specialty Courses (7 hours) BIOL 2013 Medical Terminology (FA, SP, SU)[1] BIOL 2034/2034L Human Anatomy/Lab (FA, SP)[1]
Technical-Occupational Specialty Courses (54 hours[2]) RAD 2012/L Intro to Radiologic Sci & Hlth Care/Lab (FA) RAD 2113/L Patient Care in Radiologic Sciences/Lab (FA) RAD 2123/L Radiation Physics/Lab (FA) RAD 2134/L Radiographic Proc & Image Analysis I/Lab (FA) RAD 2204 Clinical Practice I (SP) RAD 2214 Principles of Exposure (SP) RAD 2224/L Radiographic Proc & Image Analysis II/Lab (SP) RAD 2302 Clinical Practice II (SU) RAD 2311 Basic Princ of Computed Tomography (SU) RAD 2323/L Radiographic Proc & Image Analysis III/Lab (SU) RAD 2402 Radiographic Pathology (FA) RAD 2414 Clinical Practice III (FA) RAD 2422 Digital Image Acquisition & Display (FA) RAD 2434/L Radiographic Proc & Image Analysis IV/Lab (FA) RAD 2503 Clinical Practice IV (SP) RAD 2513 Radiation Biology & Protection (SP) RAD 2523/L Pharmacology & Venipuncture/Lab (SP) RAD 2533 Radiologic Technology Seminar (SP) *FA=Fall; SP=Spring; SU=Summer* *[1]A minimum grade of C in BIOL 2013 and BIOL 2034/2034L is required for admission to the Radiologic Technology program.* *[2]Credit to contact hour ratios for RAD courses are as follows:* *Didactic (Lecture): 1 credit hour=16 contact hours* *Lab: 1 credit hour=40 contact hours* *Clinical: 1 credit hour=82.5 contact hours*
General Electives (To Complete 81 hours)
Graduation Requirements
Complete All Department Requirements Minimum 81 Total Credit Hours Minimum 15 Credit Hours in Residence at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online

Degree Requirements: Respiratory Care (575)–Associate in Applied Science
School of Arts and Sciences
Department of Agriculture, Biology, and Health Sciences
Catalog Year: 2025-2027

General Education Requirements (26-27 hours)
Required Courses (26-27 hours)
COMM 1113 Principles of Communication ENGL 1113 English Composition I BIOL 1214/L Human Biology/Lab[1] CHEM 1004, 1105/1105L, or 1364/1361[1] MATH 1413, 1463, 1513, 1613, 2215, 2713, or STAT 1513 HIST 1483 or HIST 1493 U.S. History to or Since 1865 FNAR 1013 Exploring Multiculturalism PS 1113 American Federal Government
University Requirements
UNIV 1001–1 hour Computer Literacy–RESP 2414 Respiratory Clinical Practice IV
Major Course Requirements (40 hours)
Required Courses (40 hours)
BIOL 2013 Medical Terminology (FA, SP, SU)[1] RESP 2100 Respiratory Care Recitation I (SP) RESP 2113/L Respiratory Mechanics/Lab (SP) RESP 2123/L Respiratory Therapy Procedures I/Lab (SP) RESP 2133 Cardiopulmonary Anatomy and Physiology (SP) RESP 2143 Respiratory Pharmacology (SP) RESP 2153 Respiratory Pathology (SP) RESP 2161 Respiratory Clinical Practice I (SP) RESP 2200 Respiratory Care Recitation II (FA) RESP 2213/L Respiratory Therapy Procedures II/Lab (FA) RESP 2222 Respiratory Clinical Practice III (FA) RESP 2233 Critical Care (FA) RESP 2242 Pediatric Respiratory Care (FA) RESP 2253/L Mechanical Ventilation/Lab (FA) RESP 2313 Respiratory Clinical Practice III (SU) RESP 2411 NBRC Test Preparation (SP) RESP 2414 Respiratory Clinical Practice IV (SP) *FA=Fall; SP=Spring; SU=Summer* *[1]A minimum grade of C in BIOL 1214/1214L, BIOL 2013, and CHEM 1004, 1105/1105L, or 1364/1361 is required for admission to the Respiratory Care program.*
General Electives (To Complete 66-67 hours)
Graduation Requirements
Department Requirements Minimum 66-67 Total Credit Hours Minimum 15 Credit Hours in Residence at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online

Degree Requirements: Allied Health Sciences (565)–Associate in Science
School of Arts and Sciences
Department of Agriculture, Biology, and Health Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	PSY 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science: BIOL 1214/L Physical Science: CHEM 1105/1105L or 1361/1364	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (IT 1013, MIS 2113)	
Major Requirements (23-24 hours)		
Required Courses (11 hours)	**Additional Requirements (12-13 hours)**	
AHS 1003 Intro to Public Health (FA, SP, SU) BIOL 2034/L Human Anatomy/Lab (FA, SP, SU) BIOL 2134/L Human Physiology*/Lab (FA, SP, SU) *Prerequisites: CHEM 1105/L or 1364/1, MATH 1513, and BIOL 2034/L. *FA=Fall; SP=Spring; SU=Summer*	Select from the following classes; consult advisor and appropriate catalogs: BIOL 2013 Medical Terminology BIOL 2124/L Microbiology*/Lab SES 2023 Nutrition SES 2033 First Aid PSY 3353 Lifespan Human Growth and Development STAT 1513 Intro to Statistics Approved Electives (3 hours) *Prerequisites: BIOL 1214, CHEM 1105/L or 1364/1, MATH 1513.	
General Electives (To Complete 68-71 hours)		
Graduation Requirements		
Department Requirements Minimum 68-71 Total Credit Hours Minimum 15 Credit Hours in Residence at CU Minimum 37 Liberal Arts and Science Credit Hours Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online		

Degree Requirements: Agriculture (400)–Bachelor of Science
School of Arts and Sciences
Department of Agriculture, Biology, and Health Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713	PS 1113	AGRC 2013
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science: BIOL 1004/L, 1214L, or 1364/L Physical Science: CHEM 1004, 1105/L, or 1364/1	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.

General Education Non-PE Electives (To total at least 44 hours, if needed)*.

Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).

University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (AGRC 4572)	Capstone Experience (AGRC 4572)

Major Requirement (46 hours)

Required Core (26 hours)

AGRC 1124/L Intro. to Animal Science/Lab (FA)
AGRC 1214/L Intro. to Plant Science/Lab (SP)
AGRC 2013 Intro. to Agricultural Economics (FA, SP)
AGRC 2124/L Fundamentals of Soil Science/Lab (SP)
ANIM 3133 Breeds of Livestock (FA)
AGRC 3513 Agricultural Management (FA)
AGRC 3613 Agricultural and Food Policy (SP)
AGRC 4572 Agricultural Capstone (FA)

FA=Fall; SP=Spring; SU=Summer

Option (20 hours)

Agribusiness Management (20 hrs)
Required Courses (9 hrs)
ACCT 2013 Princ Fin Acct
AGRC 3303 Ag Marketing
AGRC 4333 Ag Finance
Electives (11 hrs)
Min. of 11 hours selected from ACCT, BUS, ECON, FIN, MKTG, or MGMT (Max. 3 hrs in AGRC 4421-3.
(Courses in the Dept of Business may require additional prereqs.)

Agronomy (20 hrs)
Required Courses (9 hrs)
AGRC 4223 Integrated Pest Mgmt
AGRN 3213 Forage, Range, & Pasture Crops
AGRN 3513 Fiber & Oilseed Crops
Electives (11 hrs)
Min. of 11 hrs selected from AGRC, AGRN, ANIM, BIOL (above 1364), or ENSC (Max. 3 hrs each in AGRC 4321-3 or AGRC 4421-3)

Animal Science (20 hrs)
Required Courses (10 hrs)
AGRC 4223 Integrated Pest Mgmt
ANIM 3653 Anim Nutrition
ANIM 4434 Anim Reprod
Electives (10 hrs)
Min. of 10 hrs selected from AGRC, AGRN, ANIM, BIOL (above 1364), or ENSC (Max. 3 hrs each in AGRC 4321-3 or AGRC 4421-3)

General Agriculture (20 hrs)
Required Course (3 hrs)
AGRC 4223 Integrated Pest Mgmt
Electives (17 hrs)
Min.of 17 hrs selected from AGRC, AGRN, ANIM, BIOL (above 1364), or ENSC (Max. 3 hrs each in AGRC 4321-3 or AGRC 4421-3).

Additional Requirements (3 hours)

STAT 1513 Introduction to Statistics **OR** STAT 2013 Intro Probability and Statistics I **OR** STAT 2613 Business Statistics **OR** BIOL 4153 Biometry
(Some courses may require additional prerequisites)

General Electives (To Complete 124 hours)

Graduation Requirements

Department Requirements
Minimum 124 Total Credit Hours
Minimum 40 Upper Division Credit Hours
Minimum 55 Liberal Arts & Science Credit Hours
Minimum 30 Credit Hours in Residence at CU
Minimum 60 Credit Hours at a 4-Year Institution
Minimum ½ of Major Upper Div Hours Completed at CU
15 of last 30 Credit Hours or ½ of Major Completed at CU
Retention GPA 2.0; Cameron GPA 2.0
Complete Graduation Application Online

Degree Requirements: Biology (310)–Bachelor of Science
School of Arts and Sciences
Department of Agriculture, Biology, and Health Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1513, 1613, 2215, 2713	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science: BIOL 1364/L Physical Science: CHEM 1361/1364	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (BIOL 4901)	Capstone Experience (BIOL 3901, 4901)

Major Requirements (44-63 hours)	
Required Core Courses (14-25 hours)	**Option (19-49 hours)**
BIOL 1364/L Principles of Biology I/Lab (FA, SP) BIOL 1474/L Principles of Biology II/Lab (FA, SP) BIOL 2144/L Botany/Lab *(Conc CMB & OB only)* (SP) BIOL 2154/L Zoology/Lab *(Conc CMB & OB only)* (FA) BIOL 3014/L Genetics/Lab (FA, SP) BIOL 3043 Evolution *(Conc CMB & OGB only)* (FA) BIOL 3901 Biology Capstone I (FA) BIOL 4901 Biology Capstone II (SP) *FA=Fall; SP=Spring; SU=Summer*	Choose one of the following: **Cellular and Molecular Biology** **Organismal Biology** **Medical Laboratory Science** (See next page for course list)

Additional Requirements (22-34 hours)
CHEM 1361/1364 General Chemistry I/General Chemistry I Lab *(All Options)*
CHEM 1471/1474 General Chemistry II/General Chemistry II Lab *(All Options)*
CHEM 3314/L Organic Chemistry I/Lab *(All Options)*
CHEM 3324/L Organic Chemistry II/Lab *(Options CMB & MLS)*
CHEM 4403 Biochemistry I (*Options CMB & MLS*)
MATH 1613 Plane Trigonometry (or higher) *(Options CMB & OB)*
MATH 1513 or higher *(Option OB)*
PHYS 1115/L Physics I/Lab **OR** PHYS 2015/L Physics I for Science and Engineering Majors I/Lab *(Options CMB & OB)*
PHYS 1215/L Physics II/Lab **OR** PHYS 2025/L Physics II for Science and Engineering Majors I/Lab *(Option CMB)*
General Electives (To Complete 124 hours)

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Div Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Degree Requirements: Biology (310)–Bachelor of Science (Cont'd)

Option (19–49 hours)

Cellular and Molecular Biology (CMB)

Required Courses (8 hours)

BIOL 3174/L Molecular Biology/Lab
BIOL 4174/L Cell Biology/Lab

Electives (11-12 hours)

BIOL 3054/L Plant Taxonomy/Lab
BIOL 3064/L Ecology/Lab
BIOL 3074/L Natural History of the Vertebrates/Lab
BIOL 3084/L Ornithology/Lab
BIOL 3093 Immunology
BIOL 3104/L Comparative Vertebrate Anatomy/Lab
BIOL 3114/L Mammalogy/Lab
BIOL 3124/L Histology/Lab
BIOL 3184/L Principles of Anatomy/Lab
BIOL 3194/L Fundamentals of Microbiology/Lab
BIOL 4004/L Physiology/Lab
BIOL 4054/L Vascular Plant Morphology/Lab
BIOL 4064/L Advance Ecology/Lab
BIOL 4114/L Advanced Microbiology/Lab
BIOL 4121-4 Special Studies (4 hours max)
BIOL 4153 Biometry
BIOL 4163 Physiology & Molecular Biology of Plants
BIOL 4421-3 Biology Internship (3 hours max)

Medical Laboratory Science (MLS)

Required Courses (49 hours)

BIOL 2134/L Human Physiology/Lab **OR** BIOL 4004/L Physiology/Lab
BIOL 3093 Immunology
BIOL 3174/L Molecular Biology/Lab
BIOL 3194/L Fundamentals of Microbiology/Lab
BIOL 4174/L Cell Biology/Lab
MLS 4117 Clinical Microbiology*
MLS 4125 Clinical Chemistry*
MLS 4236 Clinical Hematology*
MLS 4246 Clinical Immunology*
MLS 4325 Clinical Chemistry II*
MLS 4351 Topics in Medical Technology*

**Acceptance into an approved Oklahoma Consortium of Clinical Laboratory Science Affiliates (OCCLSA) clinical training program and departmental permission is required.*

Organismal Biology (OB)

Required Courses (8 hours)

BIOL 3064/L Ecology/Lab
BIOL 3054/L Plant Taxonomy/Lab **OR** BIOL 3074/L Natural History of Vertebrates/Lab **OR** BIOL 3104/L Comparative Vertebrate Anatomy/Lab

Electives (11-12 hours)

BIOL 3054/L Plant Taxonomy/Lab
BIOL 3074/L Natural History of the Vertebrates/Lab
BIOL 3084/L Ornithology/Lab
BIOL 3093 Immunology
BIOL 3104/L Comparative Vertebrate Anatomy/Lab
BIOL 3114/L Mammalogy/Lab
BIOL 3124/L Histology/Lab
BIOL 3174/L Molecular Biology/Lab
BIOL 3184/L Principles of Anatomy/Lab
BIOL 3194/L Fundamentals of Microbiology/Lab
BIOL 4004/L Physiology/Lab
BIOL 4054/L Vascular Plant Morphology/Lab
BIOL 4064/L Advanced Ecology/Lab
BIOL 4114/L Advanced Microbiology/Lab
BIOL 4121-4 Special Studies (4 hours max)
BIOL 4153 Biometry
BIOL 4163 Physiology and Molecular Biology of Plants
BIOL 4174/L Cell Biology/Lab
BIOL 4421-3 Biology Internship (3 hours max)

DEPARTMENT OF ART, MUSIC, AND THEATRE ARTS

FACULTY

CHAIR–Kirsten Underwood, Associate Professor
PROFESSORS–G. Hoepfner, H. Whang
ASSOCIATE PROFESSORS–J. Little, C. Morren, B. Williams
ASSISTANT PROFESSORS–J. Crouch, N. McCabe, C. Miessler
INSTRUCTORS–J. Tartiere

MISSION STATEMENT

The Department of Art, Music, and Theatre Arts actively seeks to make the university a driving force in the cultural life and economic development of our community by producing art exhibitions, concerts, recitals, and theatre productions to enrich the intellectual and cultural lives of our constituents. The disciplines of Art, Music, and Theatre Arts energize the cultural life of the Cameron Campus and surrounding communities. We believe in the power of aesthetics and in the unique talents of each student. We strive to inspire and guide artists, educators, musicians, actors, designers, and scholars to achieve success as well as to become citizens of the world.

PROGRAMS OF STUDY

Degrees and Majors:

B.A. Art
B.A. Music
B.A. Theatre Arts with options in
- Performance
- Technical

B.F.A. Art
- Graphic Design
- Painting
- Printmaking
- Sculpture

B.M. Music
- Composition
- Piano Performance
- Instrumental Performance
- Vocal Performance

B.M.E. Music Education
- Instrumental/General
- Vocal/General

Certificates:
- Acting (Embedded in the B.A. in Theatre Arts)
- Technical Theatre (Embedded in the B.A. in Theatre Arts)

COURSE DESCRIPTIONS

Course descriptions for the following course prefixes offered in the department are located at the end of the catalog: Art (ART), Fine Arts (FNAR), Music (MUSC), and Theatre Arts (THTR).

GENERAL INFORMATION

The Department of Art, Music, and Theatre Arts actively seeks to make the University a driving force in the cultural life and economic development of our community by producing art exhibitions, concerts, recitals, and theatre productions, to enrich the intellectual and cultural lives of our constituents. The disciplines of Art, Music, and Theatre Arts energize the cultural life of the Cameron Campus and surrounding communities. We believe in the power of aesthetics and in the unique talents of each student. We strive to inspire and guide artists, educators, musicians, actors, designers, and scholars to achieve success as well as to become citizens of the world.

STUDENT ORGANIZATIONS

Alpha Psi Omega–Alpha Psi Omega is the National Theatre Honor Society.
Kappa Kappa Psi–Kappa Kappa Psi serves as the honors society for collegiate band programs.
Mu Phi Epsilon–Mu Phi Epsilon is a co-educational International Professional Music Fraternity. Its purpose is the recognition of scholarship and musicianship, and the development of a bond of friendship among its members.

Degree Requirements: Art (110)–Bachelor of Arts
School of Arts and Sciences
Department of Art, Music, and Theatre Arts
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (ART 1231)	Capstone Experience (ART 4991)

Major Requirements (47 hours)

Required Courses (26 hours)

ART 1113 Drawing I (FA)
ART 1123 Drawing II (SP)
ART 1213 Design I (FA)
ART 1223 Design II (SP)
ART 1231 Computer-Studio Lab (FA)
ART 2243 Color (FA)
ART 2613 History of Art I (FA)
ART 2623 History of Art II (SP)
ART 4633 Hist of Art Seminar: Origins Modern Art (SP)
ART 4991 Senior Art Exhibition and Capstone (SP)

FA=Fall; SP=Spring; SU=Summer

Major Electives (21 hours)

ART 3133 Figure Drawing **OR** ART 4143 Advanced Drawing **AND** *18 hours taken in at least three content areas (Painting, Printmaking, Sculpture, or Graphic Design); at least 9 hours must be upper division.*

Painting:
ART 2313 Painting **AND** *up to 6 hours chosen from*:
ART 4333 Adv Painting II: Contemporary Painting Tech
ART 4343 Adv Painting III: Subject Matter Exploration
ART 4353 Adv Painting IV: Style Exploration
ART 4363 Adv Painting V: Painting Thesis Introduction
ART 4373 Adv Painting VI: Painting Thesis Conclusion
ART 4383 Adv Painting: Traditional Watercolor
ART 4393 Advanced Painting: Contemporary Watercolor

Printmaking:
ART 2413 Printmaking **AND** *up to 6 hours chosen from*:
ART 4433 Adv Printmaking II: Woodcut
ART 4443 Adv Printmaking III: Serigraphy
ART 4453 Adv Printmaking IV: Monoprint/Monotype
ART 4463 Adv Printmaking V: Relief Linocut
ART 4473 Adv Printmaking VI: Lithography/Relief
ART 4483 Adv Printmaking VII: Lithography

Sculpture:
ART 2513 Sculpture **AND** *up to 6 hours chosen from*:
ART 4533 Adv Sculpture II: TIG Welding/Hand Building Clay
ART 4543 Adv Sculpture III: Sp Pr Welding/Wd/Cl
ART 4553 Adv Sculpture IV: Time-Based Media
ART 4563 Adv Sculpture V: Public Installation Sculpture
ART 4573 Adv Sculpture VI: Exhibition Design/Construction

Graphic Design:
ART 2253 Computer Graphic Design **AND** *up to 6 hours chosen from:*
ART 2743 Typography
ART 3213 Graphic Design
ART 3743 Adv Computer Graphics
ART 3753 Layout/Production
ART 4213 Advanced Graphic Design
ART 4713 History of Graphic Design

Minor Requirements (18 hours)

A full list of available minors is available on the CU website.

General Electives (To Complete 124 hours)

Graduation Requirements

Department Requirements
Minimum 124 Total Credit Hours
Minimum 40 Upper Division Credit Hours
Minimum 80 Liberal Arts & Science Credit Hours
Minimum 30 Credit Hours in Residence at CU
Minimum 60 Credit Hours at a 4-Year Institution
Minimum ½ of Major Upper Division Hours Completed at CU
15 of last 30 Credit Hours or ½ of Major Completed at CU
Retention GPA 2.0; Cameron GPA 2.0
Complete Graduation Application Online

Degree Requirements: Music (160)–Bachelor of Arts
School of Arts and Sciences
Department of Art, Music, and Theatre Arts
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity: MUSC 1033 Aesthetics: Any non-MUSC Humanities *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (MUSC 3333)	Capstone Experience (MUSC 4900)

Major Requirements (40 hours)

Required Courses (40 hours)

MUSC 1000 Concert/Recital Attendance (7 sem.) (FA, SP)
Major Ensemble (8 semesters, 1 hour each) Choose from the following, in an ensemble appropriate for focus area:
- MUSC 1110-1 Concert Band (FA, SP)
- MUSC 1120-1 Orchestra (FA, SP)
- MUSC 1140-1 Concert Choir (FA, SP)
- MUSC 1150-1 Guitar Ensemble (FA, SP)
- MUSC 3171 Accompanying (FA, SP)

Piano, Strings and Guitar students must take 2 semesters of Major Ensemble in either Concert Band or Concert Choir, can be for 0 hours.

MUSC 2312 Harmony & Structure I (FA)
MUSC 2332 Harmony & Structure II (SP)
MUSC 3312 Harmony & Structure III (FA)
MUSC 2321 Sight, Singing & Ear Training I (FA)
MUSC 2341 Sight, Singing & Ear Training II (SP)
MUSC 3321 Sight, Singing & Ear Training III (FA)
MUSC 3513 Music History I: Antique-Renaissance (FA)
MUSC 3523 Music History II: Baroque-Classical (SP)
MUSC 3533 Music History III: Romantic-Contemp (FA)
MUSC 3612 Fundamentals of Conducting (Odd FA)
Major Lesson Field (8 hours)
- MUSC 1201 Class Lessons (FA, SP)
- MUSC 2201-2 Private Lessons (FA, SP)
- MUSC 3801-4 Private Lessons (FA, SP)
- MUSC 4801-4 Private Lessons (Min. 2 hours) (FA, SP)

Piano (4 hours)
- MUSC 1201 Class Lessons: Piano (FA, SP)

(*Not required if proficiency is met)*
MUSC 4900 Senior Music Capstone (FA, SP)
All music majors (BA) must pass a junior standing examination and a keyboard proficiency examination before their junior year.

FA=Fall; SP=Spring; SU=Summer

Minor Requirements (18 hours)

A full list of available minors is available on the CU website.

General Electives (To Complete 124 hours)

Graduation Requirements

Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Division Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 80 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Degree Requirements: Theatre (170)–Bachelor of Arts
School of Arts and Sciences
Department of Art, Music, and Theatre Arts
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (THTR 4993)	Capstone Experience (THTR 4993)
Major Requirements–56 hours		
Required Courses (38) hours	**Option (15 hours)**	**Electives in Theatre (3 hours)**
THTR 1001 Thtr Pract (8 Sem) (FA, SP) THTR 1103 Intro to Theatre (FA, SP) THTR 1203 Tech Production (Even FA) THTR 2403 Stage Mgmt (Even FA) THTR 2603 Acting I (Even FA) THTR 3403 Directing (Even SP) THTR 3803 T/D: Beginnings (Even FA) THTR 3813 T/D: Renaissance (Odd SP) THTR 3823 T/D:18/19 C (Odd FA) THTR 3833 T/D:20/21 C (Even SP) THTR 4993 Theatre Arts Capstone (FA) *FA=Fall; SP=Spring; SU=Summer*	Select one of the following: **Performance** THTR 1133 Voice and Diction THTR 1503 Make-Up THTR 1603 Stage Movement THTR 3603 Acting II THTR 4603 Acting III **Technical** THTR 1503 Make-up **OR** THTR 3703 Audio THTR 2203 Stagecraft THTR 2503 Costume Techniques THTR 3303 Lighting THTR 4203 Scene Design **OR** THTR 4303 Lighting Design **OR** THTR 4503 Costume Design	May include the following: THTR 1901-3 Theatre Lab THTR 3901-3 Workshop THTR 4901-3 Independent Study THTR 4911-3 Seminar THTR 4921-6 Internship All Theatre majors are required to keep a portfolio of their work and complete a final project. (See advisor for details.)
General Electives–to Complete 124 hours		

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Division Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 80 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Embedded Certificate Requirements: Acting (271)
(Embedded in Bachelor of Arts in Theatre)
School of Arts and Sciences
Department of Art, Music and Theatre Arts
Catalog Year: 2025-2027

Embedded Certificate Requirements (15 hours)
THTR 1103 Intro to Theatre THTR 1603 Stage Movement THTR 2603 Acting I THTR 3603 Acting II THTR 3403 Directing **OR** THTR 4603 Acting III
Graduation Requirements
Retention GPA 2.0 Cameron GPA 2.0 Minimum 4 hours completed at CU

Embedded Certificate Requirements: Technical Theatre (272)
(Embedded in Bachelor of Arts in Theatre)
School of Arts and Sciences
Department of Art, Music and Theatre Arts
Catalog Year: 2025-2027

Embedded Certificate Requirements (15 hours)
THTR 1103 Intro to Theatre THTR 1203 Tech Production THTR 2203 Stagecraft **OR** THTR 3303 Lighting THTR 2503 Costume Techniques THTR 1503 Make-Up **OR** THTR 3703 Audio
Graduation Requirements
Retention GPA 2.0 Cameron GPA 2.0 Minimum 4 hours completed at CU

Degree Requirements: Art (111)–Bachelor of Fine Arts
School of Arts and Sciences
Department of Art, Music, and Theatre Arts
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4–5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (ART 1231 or 2253)	Capstone Experience (ART 4991)

Major Requirements–68 hours	
Required Courses–32 hours	
ART 1113 Drawing I (FA)	ART 2613 History of Art I (FA)
ART 1123 Drawing II (SP)	ART 2623 History of Art II (SP)
ART 1213 Design I (FA)	ART 3133 Figure Drawing (FA)
ART 1223 Design II (SP)	ART 4633 Hist of Art Sem: Origins of Modern Art (SP)
ART 1231 Computer-Studio Lab (FA)	ART 4643 Hist of Art Sem: Mod Art Movements (Even FA)
ART 2243 Color (FA)	ART 4991 Senior Art Exhibition and Capstone (SP)
FA=Fall; SP=Spring; SU=Summer	

Option (36 hours)

Graphic Design (36 hours)	**Painting (36 hours)**	**Printmaking (36 hours):**	**Sculpture (36 hours):**
Required Courses (27 hours)	*Required* (15 hours)	*Required (9 hours)*	*Required (24 hours)*
ART 2253 Comp Graph Desgn	ART 2313 Painting	ART 2413 Printmaking	ART 2513 Sculpture
ART 2743 Typography	ART 4143 Adv Drawing	ART 4143 Adv Drawing	ART 4143 Adv Drawing
ART 3213 Graphic Design	ART 4323 Adv Painting I	ART 4423 Adv Printmaking I	ART 4523 Adv Sculptr I
ART 3743 Adv Comp Grph/Imge Enhanc	ART 4363 Adv Painting V	*Advanced &Major Electives (27 hours)*	ART 4533 Adv Sculptr II
ART 3753 Layout/Production	ART 4373 Adv Painting VI;	*Advanced Electives (15 hours)*	ART 4543 Adv Sculptr III
ART 4213 Adv Graph Desgn	*Advanced & Major Electives (21 hours)*	Selected from:	ART 4553 Adv Sculptr IV
ART 4713 Hist Graphic Desgn	*Advanced Electives (9 hours)*	ART 4433 Adv Prntmkg II	ART 4563 Adv Sculptr V
ART 4733 Internship/Art Portfolio	Selected from:	ART 4443 Adv Prntmkg III	ART 4573 Adv Sculptr VI
ART 4933 Senior Art Studio	ART 4333 Adv Painting II	ART 4453 Adv Prntmkg IV	*Major Electives (12 hours)*
Major Electives (9 hours)	ART 4343 Adv Painting III	ART 4463 Adv Prntmkg V	Selected in consultation with an advisor, from at least two add'l options.
Selected in consultation with advisor from at least 2 add'l options.	ART 4353 Adv Painting IV	ART 4473 Adv Prntmkg VI	ART 4911-4 Workshop may be used in partial fulfillment of this requirement.
	ART 4383 Adv Pnt: Trad Wtrcl	ART 4483 Adv Prntmkg VII	
	ART 4393 Adv Pnt:Cont Wtrcl	*Major Electives (12 hours)*	
	Major Electives (12 hours)	Selected in consultation with an advisor, from at least two add'l options.	
	Selected in consultation with an advisor, from at least two add'l options.		

General Electives (To Complete 124 Hours)	
Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Division Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 40 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Degree Requirements: Music (161)–Bachelor of Music
School of Arts and Sciences
Department of Art, Music, and Theatre Arts
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity: MUSC 1033 Aesthetics: Any non-MUSC Humanities *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		

University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (MUSC 3333)	Capstone Experience (MUSC 4900)

Major/Minor Requirements (81 hours)

Required Courses (44 hours)

MUSC 1000 Concert/Recital Attendance (7 sem) (FA, SP)
Major Ensemble (8 semesters, 1 hour each) Choose from the following, in an ensemble appropriate for option:
- MUSC 1110-1 Concert Band (FA, SP)
- MUSC 1120-1 Orchestra (FA, SP)
- MUSC 1140-1 Concert Choir (FA, SP)
- MUSC 1150-1 Guitar Ensemble (FA, SP)
- MUSC 3171 Accompanying (FA, SP)

Piano, Strings and Guitar students must take 2 semesters of Major Ensemble in either Concert Band or Concert Choir, can be for 0 hours.

MUSC 2312 Harmony & Structure I (FA)
MUSC 2332 Harmony & Structure II (SP)
MUSC 3312 Harmony & Structure III (FA)
MUSC 3332 Harmony & Structure IV (SP)
MUSC 2321 Sight, Singing & Ear Training I (FA)
MUSC 2341 Sight, Singing & Ear Training II (SP)
MUSC 3321 Sight, Singing & Ear Training III (FA)
MUSC 3341 Sight, Singing & Ear Training IV (SP)
MUSC 3513 Music History I: Antique-Renaissance (FA)
MUSC 3523 Music History II: Baroque-Classical (SP)
MUSC 3533 Music History III: Romantic-Contemp (FA)
MUSC 3612 Fundamentals of Conducting (Odd FA)
MUSC 3622 Advanced Conducting (Even SP)
MUSC 3990 Junior Recital (FA, SP)
MUSC 4342 Arranging (Even FA)
MUSC 4900 Senior Music Capstone (FA, SP)
MUSC 4990 Senior Recital (FA, SP)

FA=Fall; SP=Spring; SU=Summer

Option: Major Lesson Field (31-35 hours)

Composition
Instrumental Performance
Piano Performance
Vocal Performance
(Requirements listed on next page)

Upper Division Electives in Music Theory or Music History (6 hours)

Must take 6 hours from the list below.
MUSC 3981-3 Special Topics in the Advanced Study of Music
MUSC 4312 Counterpoint
MUSC 4322 Post Tonal Techniques
MUSC 4332 Form & Analysis
MUSC 4362 Computer Music
MUSC 4981-3 Independent Study

General Elective (To Complete 124 hours)

Graduation Requirements

Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Division Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 40 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Degree Requirements: Music (161)–Bachelor of Music (Cont'd)

Major/Minor Requirements (81 hours) (Cont'd)

Option: Major Lesson Field (31-35 hours)

Composition (31 hours)
MUSC 3351-3 Composition (6 hours)
MUSC 4351-3 Composition (8 hours)
MUSC 4362 Computer Music
Piano (4 hours)
MUSC 1201 Class Piano I-V (or demonstrated competency)
Minor Lesson Field (6 hours)
MUSC 3801-4 Private Lessons
MUSC 4801-4 Private Lessons
MUSC Electives (5 hours)

Vocal Performance (34 hours)
Vocal Diction (2 hours)
MUSC 3761 English and Italian Diction
MUSC 3771 French and German Diction
MUSC 4753 Vocal Pedagogy
Major Lesson Field (16 hours)
MUSC 3801-4 Private Lessons: Voice
MUSC 4801-4 Private Lessons: Voice (Min. 8 hours)
Piano (6 hours)
MUSC 1201 Class Lessons: Piano I-V
MUSC 3801 Private Lessons: Piano.
Foreign Language (3 hours)
(German, French or Italian recommended.)
MUSC Electives (4 hours)

Instrumental Performance (33 hours)
Major Lesson Field (16 hours)
MUSC 3801-4 Private Lessons (Major instrument)
MUSC 4801-4 Private Lessons (Major instrument) (Min. 8 hours)
Piano (4 hours)
MUSC 1201 Class Piano I-V (or demonstrated competency)
Minor Lesson Field (6 hours)
MUSC 3801-4 Private Lessons (Secondary instrument)
(Min 3 hours in Private Lessons: Voice)
MUSC Electives (5 hours)
Methods Courses (2 hours)
Choose one from the following:
MUSC 3642 Woodwind Methods
MUSC 3652 Brass Methods
MUSC 3662 String Methods
MUSC 3672 Percussion Methods

Piano Performance (31 hours)
MUSC 4743 Keyboard Pedagogy
Major Lesson Field (16 hours)
MUSC 3801-4 Private Lessons: Piano
MUSC 4801-4 Private Lessons: Piano (Min. 8 hours)
Minor Lesson Field (6 hours)
MUSC 3801-4 Private Lessons
MUSC 4801-4 Private Lessons
(Min 3 hours in Private Lessons: Voice)
MUSC Electives (6 hours)

All music Majors (BM Degree) must pass an entrance examination, a junior standing examination, and a keyboard proficiency examination, and must enroll in the major ensemble appropriate to the student's area of option for 8 semesters.

Degree Requirements: Music Education (681)–Bachelor of Music Education
School of Arts and Sciences
Department of Art, Music, and Theatre Arts
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	PSY 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity: MUSC 1033 Aesthetics: Any non-MUSC Humanities *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (EDUC 3673)	Capstone Experience (MUSC 4900)

Major Requirements (86–87 hours)

Required Courses (29 hours)

MUSC 1000 Concert/Recital Attendance (7 semesters)(FA, SP)
Major Ensemble (8 semesters) Choose from the following, in an ensemble appropriate for option:
- MUSC 1110-1 Concert Band (FA, SP)
- MUSC 1120-1 Orchestra (FA, SP)
- MUSC 1140-1 Concert Choir (FA, SP)
- MUSC 1150-1 Guitar Ensemble (FA, SP)
- MUSC 3171 Accompanying (FA, SP)

Piano, Strings and Guitar students must take 2 semesters of Major Ensemble in either Concert Band or Concert Choir, can be for 0 hours.

MUSC 2312 Harmony & Structure I (FA)
MUSC 2321 Sight, Singing & Ear Training I (FA)
MUSC 2332 Harmony & Structure II (SP)
MUSC 2341 Sight, Singing & Ear Training II (SP)
MUSC 3312 Harmony & Structure III (FA)
MUSC 3321 Sight, Singing & Ear Training III (FA)
MUSC 3332 Harmony & Structure IV (SP)
MUSC 3341 Sight, Singing & Ear Training IV (SP)
MUSC 3513 Music History I: Antique-Renaissance (FA)
MUSC 3523 Music History II: Baroque-Classical (SP)
MUSC 3533 Music History III: Romantic-Contemp (FA)
MUSC 3612 Fundamentals of Conducting (Odd FA)
MUSC 3622 Advanced Conducting (Even SP)
MUSC 4342 Arranging (Even FA)
MUSC 4712 Elementary Methods (Odd FA)
MUSC 4900 Senior Music Capstone (FA, SP)
MUSC 4990 Senior Recital (FA, SP)

FA=Fall; SP=Spring; SU=Summer

Option: Major Lesson Field–24-25 hours

Instrumental/General (25 hours)
MUSC 1201 Class Lessons-Voice **OR**
- MUSC 3801 Private Lessons-Voice

MUSC 3642 Woodwind Methods
MUSC 3652 Brass Methods
MUSC 3662 String Methods
MUSC 3672 Percussion Methods
MUSC 4722 Secondary Instrumental Methods
Major Lesson Field (10 hours)
- MUSC 1201 Class Lessons
- MUSC 2201-2 Private Lessons
- MUSC 3801-4 Private Lessons
- MUSC 4801-4 Private Lessons (Min. 2 hours)

Piano (4 hours)
- MUSC 1201 Class Lessons: Piano

Vocal/General (24 hours)
MUSC 3642 Woodwind Methods **OR** MUSC 3652 Brass Method**s OR** MUSC 3662 String Methods **OR** MUSC 3672 Percussion Methods **OR** MUSC 3812 Instrumental Methods for Vocal and Keyboard Education
MUSC 4732 Secondary Vocal Methods
Major Lesson Field (Voice or Keyboard) (10 hours)
- MUSC 1201 Class Lessons
- MUSC 2201-2 Private Lessons
- MUSC 3801-4 Private Lessons
- MUSC 4801-4 Private Lessons (Min. 2 hours)

Vocal Diction (2 hours)
- MUSC 3761 English and Italian Diction
- MUSC 3771 French and German Diction

MUSC 4753 Vocal Pedagogy
Piano (4 hours)
- MUSC 1201 Class Lessons: Piano

MUSC Guided Elective (1 hour)

Degree Requirements: Music Education (681)–Bachelor of Music Education (Cont'd)

Major Requirements (86–87 hours) (Cont'd)

Required Education Courses (33 hours)

EDUC 1800 Educ Introductory Seminar
EDUC 3003 Introduction to Teaching
EDUC 3612 Classroom Management*
EDUC 3673 Media & Technology in Education
EDUC 3733 Developmental Psychology
EDUC 3753 Educational Psychology(R)
EDUC 4313 Practicum in Assess. & Instruction(R)
EDUC 4653 Classroom Assessment (R)
EDUC 4935 Clinical Exper in Teaching I*(R)
EDUC 4945 Clinical Exper in Teaching II *(R)
SPED 3103 The Exceptional Child
*Should be taken in professional semester.
(R)Restricted to students admitted to Teacher Education

Additional Requirements

Music Education candidates must achieve a grade of C or better in selected general education and education courses to receive credit toward a degree. If a grade of D, F, or U is achieved, the course must be repeated.

General Electives (To Complete 138 hours)

Graduation Requirements

Department Requirements
Minimum 124 Total Credit Hours
Minimum 40 Upper Division Credit Hours
Minimum 55 Liberal Arts & Science Credit Hours
Minimum 30 Credit Hours in Residence at CU
Minimum 60 Credit Hours at a 4-Year Institution
Minimum ½ of Major Upper Div Hours Completed at CU
15 of last 30 Credit Hours or ½ of Major Completed at CU
Retention GPA 2.0; Cameron GPA 2.0
Complete Graduation Application Online
Complete Foreign Language Proficiency

Educator Preparation Admission Requirements

Minimum retention GPA of 2.5
Final grade of C or better for ENGL 1113, ENGL 1213, COMM 1113, MATH 1413 or higher, HIST 1483/1493, PS 1113 and two humanities.
Final grade of C or better OR grade check of C or better while concurrently enrolled in EDUC 3003.
Final grade of C or better OR current enrollment in EDUC 3733, Biological or Physical Science.
Final grade of S for EDUC 1800.
Passing score on EDUC 3003 lesson plan rubric.
Application for Admission to Educator Preparation.
Two (2) satisfactory faculty recommendations (1 from general education and 1 from the Department of Education).
Satisfactory completion of entry interview.
Demonstration of general education knowledge and skills through one of the following:

- Possess a Baccalaureate degree from an accredited institution, or
- Have a passing score on the Oklahoma General Education Test (OGET) of 240, or
- Have a passing score on the ACT of 22 or better with the writing section included, or
- Have a passing score on the SAT of 1120 including no less than the following scores on the essay section: five (5) on Reading, four (4) on Analysis, and five (5) on Writing, or
- Have a passing score on PRAXIS I of 150 on Math, 156 on Reading, and 162 or Writing, or
- Have a GPA of 2.75 or higher on at least 30 hours of general education courses including those required for Admission to Educator Preparation (see above).

DEPARTMENT OF CHEMISTRY, PHYSICS, AND ENGINEERING

FACULTY

CHAIR–Kyle Moore, Associate Professor
PROFESSORS–A. Nalley
ASSOCIATE PROFESSORS-R. Nayak
ASSISTANT PROFESSORS–M. Ebqa'ai, E. Kabir, ,
INSTRUCTOR–K.D. Priyasantha

MISSION STATEMENT

The Department of Chemistry, Physics, and Engineering at Cameron University provides both a liberal arts and professional education in the Physical Sciences and Engineering at the undergraduate level by providing:

1) a rigorous basic education in chemistry and physics both in theory and practice at various levels appropriate for students to prepare to become professionals in their selected fields of study as a major in chemistry or physics;
2) an education appropriate for those students preparing to teach science in the secondary schools;
3) provide two years of education for students within the field of engineering;
4) coursework appropriate for students to understand physical science as part of their general education curriculum; and
5) theory and practice in the physical sciences for those students preparing for healthcare and other careers requiring chemistry and physics.

PROGRAMS OF STUDY

Degrees & Majors:

A.A.S. Engineering with options in

- Civil Engineering
- Electrical Engineering
- Environmental Engineering
- Industrial Engineering
- Mechanical Engineering

B.S. Chemistry with options in

- ACS Certified
- Non-ACS Certified
- Health Profession

The course curricula to complete a degree in the Department of Chemistry, Physics, and Engineering is 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 Chemistry, Physics, and Engineering 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.

COURSE DESCRIPTIONS

Course descriptions for the following course prefixes offered in the department are located at the end of the catalog: Astronomy (ASTR), Chemistry (CHEM), Engineering (ENGR), Physical Science (PSCI), and Physics (PHYS).

GENERAL INFORMATION

The Department of Chemistry, Physics, and Engineering is dedicated to excellence in education and undergraduate research. Many faculty members are involved in research and mentor undergraduate projects spanning a diverse area of chemistry, physics, and engineering. Much of this research is supported through grants and the department facilities. Our facilities include modern instrumentation techniques using spectroscopy, electrochemistry, chromatography, mass spectroscopy, calorimetry, and thermogravimetric analysis.

STUDENT ORGANIZATIONS

American Chemical Society (ACS)/Chi Lambda Upsilon (Cameron University Chemistry Club)–ACS/Chi Lambda Upsilon, collectively known as the Cameron University Chemistry Club, seeks to educate the community and our members about chemistry. The club also promotes awareness of Cameron's Department of Chemistry, Physics, and Engineering throughout Southwest Oklahoma through the judging of science fairs, the production of Chemquest and the presentation of speakers.

Engineering Club–The Cameron Engineering Club introduces students to the modern concepts of engineering through demonstrations, building projects, and hosting of engaging speakers. The club's goal is to educated students and to foster interest in the field of engineering in the community.

Sigma Pi Sigma Society of Physics Students–Sigma Pi Sigma is an American honor society in physics. The society is an organization within the American Institute of Physics. It is the oldest honor society at Cameron University. The goals of the society are to honor outstanding scholarship in physics, to encourage students' interest in physics, to promote public service, and to provide a fellowship of persons who have excelled in physics.

Degree Requirements: Engineering (545)–Associate in Applied Science
School of Arts and Sciences
Department of Chemistry, Physics, and Engineering
Catalog Year: 2025-2027

General Education Requirements (27 hours)	
Required Courses (27 hours)	
ENGL 1113 English Composition I ENGL 1213 English Composition II PS 1113 American Federal Government HIST 1483 U.S. History To 1865 **OR** HIST 1493 U.S. History Since 1865 MATH 2215 Calculus and Analytic Geometry CHEM 1361/1364 General Chemistry I/Lab PHYS 2015/L Physics I for Science and Engineering Majors/Lab	
University Requirements	
UNIV 1001 **(**1 hour)	Computer Literacy **(**ENGR 1412)
Major Requirements (23-26 hours)	
Required Core Courses (12 hours)	
ENGR 1411 Introduction to Engineering (FA) ENGR 1412 Engineering Design and CAD (FA) ENGR 2113 Statics (SP) ENGR 2223 Fluid Mechanics (FA) ENGR 2723 Electrical Circuits (SP) *FA=Fall; SP=Spring; SU=Summer*	
Option (10-14 hours)	
Mechanical Engineering Option (11 hours) ENGR 2002 Professional Development in Engineering ENGR 2213 Thermodynamics ENGR 2533 Dynamics PHYS 2213 Selected Topics in General Physics or Higher* **Electrical Engineering Option (13 hours)** CS 1314/L Computer Science I/Lab ENGR 2002 Professional Development in Engineering ENGR 2314 Intro to Digital Design ENGR 2713 Digital Signals and Processing **Civil Engineering Option (10 hours)** CHEM 1471/1474 General Chemistry II/Lab ENGR 2002 Professional Development in Engineering ENGR 2153 Mech/Dsgn Materials Manufact	**Environmental Engineering Option (14 hours)** CHEM 1471/1474 General Chemistry II/Lab CHEM XXX4 Above Freshman Chemistry** ENGR 2002 Professional Development in Engineering ENGR 2153 Mech/Dsgn Materials Manufact **Industrial Engineering Option (12 hours)** CS 1314/L Computer Science I/Lab ENGR 2002 Professional Development in Engineering ENGR 2213 Thermodynamics ENGR 2533 Dynamics *PHYS 3003 & 3011 strongly encouraged. **CHEM 3314 strongly encouraged.
Additional Requirements (17 hours)	
MATH 2235 Calculus and Analytic Geometry II MATH 2244 Calculus and Analytic Geometry III MATH 2613 Foundations of Mathematics or Higher*** PHYS 2025/L Physics II for Science and Engineering Majors/Lab ***MATH 3253 strongly encouraged.	
General Elective (To Complete 68-71 hours)	
Graduation Requirements	
Department Requirements Minimum 68 Total Credit Hours Minimum 15 Credit Hours in Residence at CU Retention GPA 2.0 Cameron GPA 2.0 Complete Graduation Application Online	

Degree Requirements: Chemistry (340)–Bachelor of Science
School of Arts and Sciences
Department of Chemistry, Physics, and Engineering
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 2215	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science: CHEM 1361/1364 *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (CHEM 1361)	Capstone Experience (CHEM 4541)

Major Requirements (56-66 hours)	
Required Core Courses (25 hours)	**Option (31–41 hours)**
CHEM 1361/1364 General Chemistry I/Lab (FA, SP) CHEM 1471/1474 General Chemistry II/Lab (FA, SP) CHEM 2541 Introduction to Chemical Literature (Odd FA) CHEM 3113 Fund of Analytical Chemistry (FA) CHEM 3232 Quantitative Analysis Lab (FA) CHEM 3314/L Organic Chemistry I /Lab (FA) CHEM 3324/L Organic Chemistry II/Lab (SP) CHEM 4541 Chemistry Capstone (SP) *Students must maintain an overall 2.0 GPA for all Major courses. A minimum of 50 total hours of CHEM-prefix courses are required for the degree. *FA=Fall; SP=Spring; SU=Summer*	Majors must select from the following options: **ACS Certified Chemistry Degree Major-Minor** **Chemistry Degree with Chosen Minor** **Health Profession Chemistry Degree Major-Minor** (See next page for course list)
Additional Requirements (10 hours)	
PHYS 1115/L Physics I/Lab **OR** 2015/L Physics I for Sci & Engineering Majors/Lab (preferred) PHYS 1215/L Physics II/Lab **OR** PHYS 2025/L Physics II for Sci & Engineering Majors/Lab (preferred)	
Minor Requirements (18 hours)	
A full list of available minors is available on the CU website.	
General Electives (To Complete 124 hours)	

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Division Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Degree Requirements: Chemistry (340)–Bachelor of Science (Cont'd)

Option (31–41 hours)

ACS Certified Chemistry Degree Major-Minor (41 hours)

Required Courses (41 hours)

CHEM 4025/L Instrumental Methods of Analysis/Lab
CHEM 4334 Advanced Inorganic Chemistry
CHEM 4351 Physical Chemistry I Lab
CHEM 4353 Physical Chemistry I
CHEM 4361 Physical Chemistry II Lab
CHEM 4363 Physical Chemistry II
CHEM 4401 Biochemistry I Lab
CHEM 4403 Biochemistry I
CHEM 4413 Biochemistry II
CHEM 4491-3 Special Problems in Chemistry** (3 hrs max)
MATH 2235 Calculus & Analytic Geometry II
MATH 2244 Calculus & Analytic Geometry III
MATH 3253 Differential Equations
MATH 4433 Matrix Alg (preferred) **OR** MATH 2613 Fnd of Math

***Must take a min of 2 cr hrs of Special Problems in Research.*

Chemistry Degree with Chosen Minor (31 hours)

Required Courses (8hours)

CHEM 4351 Physical Chemistry I Lab
CHEM 4353 Physical Chemistry I
CHEM 4401 Biochemistry I Lab
CHEM 4403 Biochemistry I

Required Upper Division Analytical Elective (3-5 hours)

CHEM 3334/L Chemistry of Water & Wastewater/Lab **OR** CHEM 3343/L Org Analysis/Lab **OR** CHEM 4025/L Inst Meth of Analysis/Lab

Electives (2-4 hours)

CHEM 2441 Working Safely with Chemicals
CHEM 3334/L Chemistry of Water & Wastewater/Lab
CHEM 3343/L Organic Analysis/Lab
CHEM 4025/L Instrumental Methods of Analysis/Lab
CHEM 4332 Adv Inorganic Chemistry Lab
CHEM 4334 Advanced Inorganic Chemistry
CHEM 4361 Physical Chemistry II Lab
CHEM 4363 Physical Chemistry II
CHEM 4411 Biochemistry II Lab
CHEM 4413 Biochemistry II
CHEM 4481-3 Adv Topics in Chemistry
CHEM 4491-3 Special Problems in Chemistry** (3 hrs max)

***Only 3 hours of CHEM 4491-3 may be counted toward elective hours for this option*

Minor Requirements (18 hours)

Health Profession Chemistry Degree Major-Minor (40 hours)

Required Courses (23 hours)

CHEM 4401 Biochemistry I Lab
CHEM 4403 Biochemistry I
CHEM 4411 Biochemistry II Lab
CHEM 4413 Biochemistry I
BIOL 1364/L Principles of Biology I/Lab
BIOL 1474/L Principles of Biology II/Lab
BIOL 2124/L Microbiology/Lab
IT 1013 Intro to Computer Information Systems

Guided Electives (17 hours)

Must select at least one lower division course from following:

AGRC 1124/L Intro to Animal Science/Lab **OR** BIOL 2034/L Human Anatomy /Lab **OR** BIOL 2134/L Human Physiology/Lab **OR** BIOL 2154/L Zoology/Lab

Substitutions can be made for other professional health programs.

AGRC 1124/L Intro to Animal Science/Lab
ANIM 3653 Principles of Animal Nutrition
BIOL 2034/L Human Anatomy/Lab
BIOL 2134/L Human Physiology/Lab
BIOL 2154/L Zoology/Lab
BIOL 3014/L Principles of Genetics/Lab
BIOL 3093 Immunology
BIOL 3174/L Molecular Cell Biology/Lab
BIOL 4004/L Physiology/Lab
CHEM 3334/L Chemistry of Water & Wastewater/Lab
CHEM 3343/L Organic Analysis/Lab
CHEM 4025/L Instrumental Methods of Analysis/Lab
CHEM 4332 Adv Inorganic Chemistry Lab
CHEM 4334 Advanced Inorganic Chemistry
CHEM 4351 Physical Chemistry Lab I
CHEM 4353 Physical Chemistry I
CHEM 4361 Physical Chemistry Lab II
CHEM 4363 Physical Chemistry II
CHEM 4481-3 Adv Topics in Chemistry
CHEM 4491-3 Special Problems in Chemistry** (3 hrs. max)
STAT 2013 Intro Probability & Statistics I

***Only 3 hours of CHEM 4491-3 may be counted toward elective hours for this option.*

DEPARTMENT OF COMMUNICATION, ENGLISH, AND FOREIGN LANGUAGES

FACULTY

CHAIR–Carie Schneider, Associate Professor
PROFESSORS–W. Carney, M. Jenkins, M, Kingsley, Y. Liu, J. Morris, J. Walton, Y. Zhao
ASSOCIATE PROFESSORS–D. Bublitz, L. Chaffins, J.A. Gonzalez, J. Hodgson
SENIOR INSTRUCTOR- D. Clopton
INSTRUCTORS–L. Boatright, M. Hamilton, K. Shaw, C. Stiebens, K. Stringer

MISSION STATEMENT

The Department of Communication, English, and Foreign Languages supports Cameron University's mission of offering educational opportunities for a diverse student body. The program strives to develop students' intellectual capacities, prepares students for entry into graduate school and individual discipline-related professions, and plays a role in general education. The department faculty value free expression of ideas both oral and written, critical thought, and civil discourse.

PROGRAMS OF STUDY

Degrees and Majors:

A.A. Strategic Communication
B.A. English
B.A. English Education
B.A. International Languages
B.A. Journalism and Media Production
B.A. Strategic Communication with options in

- Communication Studies
- Public Relations

COURSE DESCRIPTIONS

Course descriptions for the following course prefixes offered in the department are located at the end of the catalog: Albanian (ALBN), Arabic (ARBC), Chinese (CHNS), Classics (CLSC), Comanche Language (CMCH), Communication (COMM), Catalan (CTLN), Dari (DARI), Dutch (DTCH), English (ENGL), French (FREN), German (GERM), Italian (ITAL), Journalism (JOUR), Journalism and Media Production (JRMP), Language (LANG), Latin (LATN), Linguistics (LING), Public Relations (PBRL), Pashto (PHTO), Polish (PLSH), Portuguese (PORT), Persian (Farsi)(PRSN), Professional Writing (PRWR), Romanian (ROMN), Radio/Television (RTV), Russian (RUSN), Somali (SMLI), Spanish (SPAN), Swahili (SWLI), and Turkish (TURK).

GENERAL INFORMATION

The Department of Communication, English and Foreign Languages supports Cameron University's mission by providing student-centered courses designed by dedicated faculty members who have extensive knowledge and experience in their fields and a deep commitment to teaching, scholarship, and service. The Department prides itself on exposing students to an array of studies in the fields of communication, journalism, language, literature, media, and writing which will prepare them to contribute to communities at home and abroad by fostering cultural awareness; developing individual critical, analytical, and creative capacities; and encouraging habits of the mind that will facilitate success in rapidly changing academic and professional worlds.

STUDENT ORGANIZATIONS

Lambda Pi Eta–Lambda Pi Eta (LPH) is the National Communication Association's official honor society at Cameron University. Alpha Psi is the CU Lambda Pi Eta chapter.

Sigma Tau Delta, English Honor Society–Beta Omicron is the CU Chapter of Sigma Tau Delta, the national English Honor Society.

Society of Professional Journalists–The Society of Professional Journalists is the nation's most broad-based journalism organization, dedicated to encouraging the free practice of journalism and stimulating high standards of ethical behavior.

Phi Sigma Iota-Foreign Languages Honor Society– Delta Rho is the CU Chapter of Phi Sigma Iota. Phi Sigma Iota recognizes outstanding accomplishment in the study or teaching of any of the academic fields related to foreign language, literature, or culture. Phi Sigma Iota is the highest academic honor in the field of foreign languages.

Degree Requirements: Strategic Communication (541)–Associate in Arts
School of Arts and Sciences
Department of Communication, English, and Foreign Languages
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 100 (1 hour)	Computer Literacy (COMM 2901)	
Major Requirements (22 hours)		
Required Courses (22 hours)		
COMM 2213 Professional Speaking (SP) COMM 2393 Interpersonal Communication (FA) COMM 2901 Strategic Communication Capstone (FA, SP) JRMP 1113 Intro to Mass Media (FA, SP) JRMP 1213 Visual Media Production (FA, SP) JRMP 1313 Audio and Visual Production (FA, SP) JRMP 2513 Writing for Mass Media (FA) PBRL 2113 Introduction to Public Relations (FA) *FA=Fall; SP=Spring; SU=Summer*		
General Electives (To Complete 66 hours)		
Graduation Requirements		
Department Requirements Minimum 66 Total Credit Hours Minimum 15 Credit Hours in Residence at CU Minimum 37 Liberal Arts and Science Credit Hours Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online		

Degree Requirements: English (120)–Bachelor of Arts
School of Arts and Sciences
Department of Communication, English, and Foreign Languages
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (IT 1013, MIS 2113)	Capstone Experience (ENGL 4993)
Major Requirements (42 hours)		
Required Core Courses (24 hours)		
PRWR 2013 Intro to Creative Writing (SP) ENGL 2333 Introduction to Technical Writing (SP) ENGL 3003 Intro to Literary Studies (FA) ENGL 3813 Literary Theory (FA) ENGL 4133 Studies in American Literature (FA) ENGL 4143 Studies in British Literature (FA) ENGL 4153 Studies in World Literature (SP) ENGL 4993 English Capstone (SP) *FA=Fall; SP=Spring; SU=Summer*		
Electives (18 hours)		
Any ENGL or PRWR prefix course (2000-level or above)		
Minor Requirements-18 hours		
A full list of available minors is available on the CU website.		
General Electives (To Complete 124 hours)		

Graduation Requirements	Teacher Education Requirements
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 80 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU Minimum 60 Credit Hours at a 4-Year Institution	Minimum ½ of Major Upper Division Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0 Cameron GPA 2.0 Complete Graduation Application at Registrar's Office

Degree Requirements: English Education (125)–Bachelor of Arts
School of Arts and Sciences
Department of Communication, English, and Foreign Languages
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	PSY 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours): HIST 2113 or 2223 or PHIL 1113 Aesthetics (3 hours): ART 1013, 2613, 2623, THTR 1103, FNAR 1013, MUSC 1013, 1023, 1033, or 1413 *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (EDUC 3673)	Capstone Experience (ENGL 4773)

Major Requirements (66 hours)	
Required Core Courses (33 hours)	**Required Education Courses (33 hours)**
PRWR 2013 Intro to Creative Writing (SP) ENGL 2983 Studies in Young Adult Literature (SP) ENGL 3003 Intro to Literary Studies (FA) ENGL 3663 Teaching Reading in Secondary Schools (FA) ENGL 4133 Studies in American Literature (FA) ENGL 4143 Studies in British Literature (FA) ENGL 4153 Studies in World Literature (SP) LING 4163 Teaching English as a Second Language (FA) ENGL 4613 English Linguistics (SP) ENGL 4623 Advanced Grammar & Usage (FA) ENGL 4773 Teaching of English (FA) *FA=Fall; SP=Spring; SU=Summer*	EDUC 1800 Educ Introductory Seminar EDUC 3003 Introduction to Teaching EDUC 3612 Classroom Management* EDUC 3673 Media & Technology in Education EDUC 3733 Developmental Psychology EDUC 3753 EducationalPsychology(R) EDUC 4313 Practicum in Assessment & Instruction(R) EDUC 4653 Classroom Assessment(R) EDUC 4935 Clinical Exper in Teaching I*(R) EDUC 4945 Clinical Exper in Teaching II*(R) SPED 3103 The Exceptional Child *Should be taken in professional semester. (R)Restricted to students admitted to Teacher Education **NOTE**: A grade of "C" or better is required for all Required Core & Education Courses.
General Electives (To Complete 124 hours)	
Graduation Requirements	
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 80 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Div Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online Complete Foreign Language Proficiency	

Degree Requirements: English Education (125)–Bachelor of Arts (Cont'd)

Educator Preparation Admission Requirements
Minimum retention GPA of 2.5 Final grade of C or better for ENGL 1113, ENGL 1213, COMM 1113, MATH 1413 or higher, HIST 1483/1493, PS 1113 and two humanities. Final grade of C or better OR grade check of C or better while concurrently enrolled in EDUC 3003. Final grade of C or better OR current enrollment in EDUC 3733, Biological or Physical Science. Final grade of S for EDUC 1800. Passing score on EDUC 3003 lesson plan rubric. Application for Admission to Educator Preparation. Two (2) satisfactory faculty recommendations (1 from general education and 1 from the Department of Education). Satisfactory completion of entry interview. Demonstration of general education knowledge and skills through one of the following: - Possess a Baccalaureate degree from an accredited institution, or - Have a passing score on the Oklahoma General Education Test (OGET) of 240, or - Have a passing score on the ACT of 22 or better with the writing section included, or - Have a passing score on the SAT of 1120 including no less than the following scores on the essay section: five (5) on Reading, four (4) on Analysis, and five (5) on Writing, or - Have a passing score on PRAXIS I of 150 on Math, 156 on Reading, and 162 or Writing, or - Have a GPA of 2.75 or higher on at least 30 hours of general education courses including those required for Admission to Educator Preparation (see above).

Degree Requirements: International Languages (185)–Bachelor of Arts
School of Arts and Sciences
Department of Communication, English, and Foreign Languages
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713 or STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, any from the following: PE 1--1, 2--1, 2--2 *Requirement waived for some students
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (IT 1013, MIS 2113)	Capstone Experience (LING 4113)

Major Requirements* (45 hours)	
Primary Language (24 hours)	**Secondary Language (12 hours)**
Arabic (ARBC) **OR** French (FREN) **OR** German (GERM) **OR** Latin (LATN) **OR** Spanish (SPAN) (FA, SP)	Arabic (ARBC) **OR** Chinese (CHNS) **OR** French (FREN) **OR** German (GERM) **OR** Italian (ITAL) **OR** Latin (LATN) **OR** Russian (RUSN) **OR** Spanish (SPAN) (FA, SP)
Language Electives (6 hours)	**Linguistics (3 hours)**
Choose from courses in the following prefixes: ALBN, ARBC, CHNS, CLSC, CMCH, CTLN, DARI, DTCH, FREN, GERM, ITAL, LANG, LATN, PHTO, PORT, PRSN, PLSH, ROMN, RUSN, SPAN, SMLI, SWLI, or TURK (FA, SP)	LING 4113 General Linguistics (FA)
*21 hours must be Upper Division. *FA=Fall; SP=Spring; SU=Summer*	

Minor Requirements (18 hours)
International Languages majors are strongly urged to consider English, Geography, Political Science, Economics, Marketing, or Management as minors. A full list of available minors is available on the CU website.
General Electives (To Complete 124 hours)

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Division Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 80 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Degree Requirements: Journalism and Media Production (141)–Bachelor of Arts
School of Arts and Sciences
Department of Communication, English, and Foreign Languages
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (JRMP 1113)	Capstone Experience (COMM 4901)
Major Requirements (40 hours)		
Required Core Courses (22 hours)		
JRMP 1113 Introduction to Mass Media (FA, SP) JRMP 1213 Visual Media Production (FA, SP) JRMP 1313 Audio and Visual Production (FA, SP) JRMP 2333/L TV Studio Production & Lab (SP) JRMP 2513 Writing for Mass Media (FA) JRMP 3613 Media Literacy (SP Even) JRMP 3811-2 Media Practicum (3 hours) (FA, SP) COMM 4901 Communication Capstone**(FA, SP) *FA=Fall; SP=Spring; SU=Summer* **All Journalism and Media Production majors are required to keep a portfolio of their work. (See Advisor for details.)		
JRMP Elective Courses (18 hours)		
18 credit hours of any combination of COMM, JRMP, or PBRL courses		
Minor Requirements (18 hours)		
Students may choose another option for a minor or may choose a minor in another discipline. A full list of available minors is available on the CU website.		
General Electives (To Complete 124 hours)		
Graduation Requirements		
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 80 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU	Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Division Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online	

Degree Requirements: Strategic Communication (140)–Bachelor of Arts
School of Arts and Sciences
Department of Communication, English, and Foreign Languages
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1413, 1463, 1513, 1613, 2215, 2713, STAT 1513	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (JOUR 2113)	Capstone Experience (COMM 4901)

Major Requirements (40 hours)	
Required Core Courses (22 hours)	**Option (18 hours)**
COMM 2213 Professional Speaking (SP) COMM 2393 Interpersonal Communication (FA) COMM 2593 Communication Research (FA) COMM 4673 Corporate & Organizational Comm (SP) COMM 4901 Communication Capstone** (FA, SP) JRMP 1113 Introduction to Mass Media (FA, SP) JRMP 3613 Media Literacy (SP Even) PBRL 2113 Introduction to Public Relations (FA) **All communication majors are required to keep a portfolio of their work. (See Advisor for details.) *FA=Fall; SP=Spring; SU=Summer*	**Communication Studies** COMM 2313 Small Group Communication COMM 3633 Persuasion COMM 4313 Intercultural Communication 9 hours chosen from any COMM, JRMP, PBRL courses **Public Relations** JRMP 1213 Visual Media Production JRMP 1313 Audio and Visual Production JRMP 2513 Writing for Mass Media PBRL 3213 Public Relations Writing & Production PBRL 3323 Strategic Campaign Communication PBRL 4823 Case Studies in Public Relations

Minor Requirements (18 hours)
Students may choose another option for a minor or may choose a minor in another discipline. A full list of available minors is available on the CU website.
General Electives (To Complete 124 hours)

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Division Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 80 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

DEPARTMENT OF COMPUTING AND MATHEMATICAL SCIENCES

FACULTY

CHAIR–Muhammad Javed, Professor
PROFESSORS–I. Argyros, M. Estep, A. Johari, H. LiC. Zhao
ASSOCIATE PROFESSORS–J. Drissi, G. Herring, F. Moinian
SENIOR INSTRUCTORS–H. Kimberling,
INSTRUCTORS–H. Alam, S. Christensen, S. McAvoy

MISSION STATEMENT

The mission of the Computing and Mathematical Sciences Department at Cameron University is to provide quality educational experiences in all computing and mathematical sciences courses offered through the department. The department offers courses that will provide all students, both majors and non-majors, with the knowledge and skills needed for life-long learning, as well as an appreciation for the beauty and power of computing and mathematical sciences. Majors will acquire a broad and solid base in computing and mathematical sciences, enabling them to continue their education in graduate school or to pursue careers in teaching, industry, or government.

PROGRAMS OF STUDY

Degrees & Majors:

A.A.S. Information Technology
B.A. Mathematical Sciences
B.S. Computer Science
B.S. Information Technology

- Computer Information Systems
- Cyber Security/Info Assurance
- Management Information Systems

Certificate:

Cyber Security (embedded in B.S. in Information Technology)

COURSE DESCRIPTIONS

Course descriptions for the following course prefixes offered in the department are located at the end of the catalog: Computer Aided Drafting (CAD), Computer Science (CS), Cyber Security and Information Assurance (IAS), Information Technology (IT), Management Information Systems (MIS), Mathematics (MATH), Statistics (STAT), and Technology (TECH).

GENERAL INFORMATION

The Department of Computing and Mathematical Sciences offers a variety of degree programs at the Associate and Baccalaureate level. These degree programs are flexible and provide opportunities that are interdisciplinary in nature. They allow students to customize the individual and professional experience with experiential learning components embedded throughout the curriculum. The curricula are easily adaptable to accommodate the fast-paced technological changes in our society.

The computing programs are continually updated to ensure students receive cutting-edge technology knowledge to prepare them for a successful career. We offer innovative and interdisciplinary programs deeply rooted in discovery, learning, and student engagement. We are committed to preparing our students as lifelong learners to succeed in a diverse and ever-changing environment.

Mathematics are fundamental to a wide variety of fields and careers. Our mathematics program is broad-based, allowing students to gain fundamental knowledge and skills in mathematics and statistics. We offer a variety of electives for students to customize their studies to their interests. We offer courses that give you the opportunity to acquire the skills, knowledge, and outlook needed to meet the challenges of a rapidly changing technological world.

STUDENT ORGANIZATIONS

Association of Computing and Technology Students (ACTS)–ACTS allows students who have an interest in data processing and information systems to share their ideas and talents with others. They meet with professionals in the information technology field and explore career possibilities.

Association of Computing Machinery (ACM)–ACM is the world's largest computing society that brings together computing educators and students, researchers, and professionals to inspire dialogue, share resources, and address the field's challenges.

MathCom–MathCom is a Cameron University Student Organization in Mathematics and Computer Science. It is open to everyone. MathCom assists in developing skills and leadership through peer, student, and faculty support.

Pi Mu Epsilon (Mathematics)–Pi Mu Epsilon is a non-secret organization whose purpose is the promotion of scholarly activity in mathematics among students in academic institutions, and among staff of qualified nonacademic institutions.

Degree Requirements: Information Technology (514)–Associate in Applied Science
School of Arts and Sciences
Department of Computing and Mathematical Sciences
Catalog Year: 2025-2027

General Education Requirements (18 hours)	
Required Courses (12 hours)	**Selected Electives (6 hours)**
ENGL 1113 English Composition I ENGL 1213 English Composition II HIST 1483 or 1493 U.S. History To or Since 1865 PS 1113 American Federal Government	Behavioral Science or Economics (3 hours): FAMS 1123, PSY 1113, SOCI 1113, AGRC 2013, ECON 2003, ECON 2013, or GEOG 3023 Humanities* (3 hours) *A list of general education courses is available online.
Major Requirements (45–46 hours)	
NOTE: All Courses Listed in Four Areas Below are Required	
Technical Specialty Courses (24 hours)	**Option Specialty Courses (9 hours)**
IT 1013 Intro to Computer Information Systems (FA, SP) IT 2033 Fund of Systems Analysis & Design (FA) IAS 2233 Intro to Infor Assurance/Security (FA, SP) IT 1063 Intro to Networking (FA, SP) IT 1414/L Programming I/Lab (SP) **and** IT 2414/L Programming II/Lab (FA) **OR** CS 1314/L Computer Science I/Lab (FA, SP) **and** CS 1514 Computer Science II/Lab (FA) IT 2064/L Internetworking Technologies/Lab (FA, SP) *FA=Fall; SP=Spring; SU=Summer*	Courses selected from: Computer Information Systems (CIS), Management Information Systems (MIS), Cyber Security and Information Assurance (IAS), or Computer Science (CS) (Advisor Approved) *See undergraduate catalog for list.
Technical-Occupational Support Courses (6 hours)	**Technical-Occupational Related Courses (6 hours)**
BUS 1113 Introduction to Business **OR** STAT 2013 Introductory Probability & Statistics I MATH 1513 College Algebra	COMM 1113 Principles of Communication **AND** One additional course selected to complement the student's goals and objectives (Advisor Approved)
General Electives (To Complete 63–64 hours)	
Graduation Requirements	
Complete All Department Requirements Minimum 63-64 Total Credit Hours Minimum 15 Credit Hours in Residence at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online	

Degree Requirements: Mathematics (150)–Bachelor of Arts
School of Arts and Sciences
Department of Computing Mathematical Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1513, 1613, 2215, 2713	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities* (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (MATH 3003)	Capstone Experience (MATH 4782 & 4792)
Major Requirements (42 hours)		
Required Core Courses (33 hours)	**Required Tech Courses (3 hours)**	**Electives (6 hours)**
MATH 2215 Calc/Anlyt Geom I (FA, SP) MATH 2235 Calc/Anlyt Geom II (FA, SP) MATH 2244 Calc/Anlytc Geom III (FA) MATH 2613 Found of Mathematics (FA) MATH 3013 Intro Linear Alg (Odd FA) MATH 3213 Abstract Algebra (Even SP) MATH 3253 Differential Equations (SP) MATH 4483 Intro Real Analysis (Odd SP) MATH 4782 Math Capstone I (FA) MATH 4792 Math Capstone II (SP) *FA=Fall; SP=Spring; SU=Summer*	MATH 3003 Tech for Adv Math	MATH 3333 College Geometry MATH 3343 Numerical Analysis MATH 3413 Discrete Math Structures MATH 4113 Intro Operations Research MATH 4423 Number Theory MATH 4471-3 Seminar in Mathematics MATH 4491-3 Indep Study in Math STAT 3113 Mathematical Statistics I STAT 3123 Mathematical Statistics II
Minor Requirements (18 hours)		
A full list of available minors is available on the CU website.		
General Electives (To Complete 124 hours)		
Graduation Requirements		
Department Requirements Minimum 124 Total Credit Hours Minimum 40 Upper Division Credit Hours Minimum 80 Liberal Arts & Science Credit Hours Minimum 30 Credit Hours in Residence at CU	Minimum 60 Credit Hours at a 4-Year Institution Minimum ½ of Major Upper Division Hours Completed at CU 15 of last 30 Credit Hours or ½ of Major Completed at CU Retention GPA 2.0; Cameron GPA 2.0 Complete Graduation Application Online	

Degree Requirements: Computer Science (415)–Bachelor of Science
School of Arts and Sciences
Department of Computing and Mathematical Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3–5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1513 or 2215	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8–9 hours)	**Humanities (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course taken from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (IT 1013, MIS 2113)	Capstone Experience (CS 4233)

Major Requirements (68 hours)		
Required Courses (42 hours)	**Additional Requirements (26 hours)**	
CS 1314/L Computer Sci I/Lab (FA, SP) CS 1514/L Computer Sci II/Lab (FA) CS 1523 Discrete Math (FA) CS 2413 Data Structures (SP) CS 2513 Comp Organ & Architect (SP) CS 3013 Network Programming (FA) CS 3183 Database Design & Mgmt (SP) CS 3513 Operating Systems (FA) CS 3713 Algorithm Analysis (FA) CS 4204/L Software Engin/Lab (FA) CS 4233 Capstone Project (SP) IAS 2233 Intro Info Assur/Sec (FA, SP) IT 1063 Intro Networking (FA, SP) *FA=Fall; SP=Spring; SU=Summer*	**Electives (13 hours)** Choose from the following: CS 2333 Web Systems Technologies IAS 2333 Computer Forensics IT 2064/L Internetworking Tech/Lab Upper Division courses with CS, IAS, IT, MIS, MATH, or STAT prefixes (see website for list)	**Mathematics (13 hours)** (Some students may also need to take some or all of the following courses as prerequisites: MATH 0013, 0103, 0213, 1513, or 1613.) MATH 1613 Plane Trigonometry MATH 2215 Calc & Analytic Geom I MATH 2235 Calc & Analytic Geom II STAT 2013 Intro Prob & Stats I Upper Division courses with MATH or STAT prefix (see website for list)
General Elective (To Complete 124 hours)		

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Div Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Degree Requirements: Information Technology (414)–Bachelor of Science
School of Arts and Sciences
Department of Computing and Mathematical Sciences
Catalog Year: 2025-2027

General Education Requirements (44–46 hours)		
Communication (9 hours)	**American History (3 hours)**	**Behavioral Science (3 hours)**
ENGL 1113; ENGL 1213; COMM 1113	HIST 1483 or 1493	FAMS 1123, PSY 1113, SOCI 1113
Mathematics (3-5 hours)	**Political Science (3 hours)**	**Economics (3 hours)**
MATH 1513, 1613, 2215, 2713	PS 1113	AGRC 2013, ECON 2003, ECON 2013, GEOG 3023
Science* (8-9 hours)	**Humanities (6 hours)**	**Health and Wellness* (4 hours)**
Biological Science (4 hours) Physical Science (4-5 hours) *One course must be a lab science.	Diversity (3 hours) Aesthetics (3 hours) *One course from each category.	SES 2003, 2013, 2023, MSL 1112, PE 1--1, 2--1, 2--2 *Requirement waived for some students.
General Education Non-PE Electives (To total at least 44 hours, if needed)*.		
Gen ed electives must be selected from the list of approved general education courses, (MSL- and PE-prefixes excluded).		
University Requirements		
UNIV 1001 (1 hour)	Computer Literacy (IT 1013)	Capstone Experience (IT 4444)

Major-Minor Requirements (63 hours)	
Core Courses (42 hours)	
IAS 2233 Intro Info Assur/Security (FA, SP)	IT 3013 Technical Communications (FA)
IT 1063 Intro to Networking (FA, SP)	IT 3603 Human Comp Interf Dev (FA)
IT 2033 Fund Sys Analysis/Design (FA)	IT 4013 Research Topics in IT (SP)
IT 1414/L Prog I/Lab (SP) **&** IT 2414/L Prog II/Lab (FA) **OR** CS 1314/L Comp Sci I/Lab (FA, SP) & CS 1514/L Comp Sci II/Lab (FA)	IT 4343 Legal/Ethical Issues IT Pro (SP)
	IT 4443 IT Capstone (SP)
	MIS 3033 Database Design & Management (FA)
IT 2064/L Internetworking Technology/Lab (FA, SP)	STAT 2013 Intro Probability & Stats I (SP)
FA=Fall; SP=Spring; SU=Summer	

Option (15 hours)		
Cyber Security and Information Assurance (15 hours)	**Management Information Systems (15 hours)**	**Technology 15 hours)**
Choose from:	Choose from:	Choose from:
IT 1733 Linux/Unix/Windows	MIS 2113 Fund MIS Tools & Skills	15 hours of IT, MIS, IAS, CS-prefix, or Advisor approved courses
IAS 2333 Computer Forensics	MIS 3013 Management Info Systems	
IAS 3063 Info Assurance Netwrk Fund	MIS 3183 Structured Query Lang	
IAS 3233 E-Commerce & Web Security	MIS 4023 Data Analytics	
IAS 3263 Security Architecture & Design	MIS 4033 Electronic Commerce	
IAS 4063 Current Topics in Info Assurance & Network Security	MIS 4433 Project Management	

Guided Electives (6 hours)
Choose from Upper Division courses in: CS, IAS, IT, or (MIS-prefixes. *See website for list.
General Electives–to Complete 124 hours

Graduation Requirements	
Department Requirements	Minimum 60 Credit Hours at a 4-Year Institution
Minimum 124 Total Credit Hours	Minimum ½ of Major Upper Div Hours Completed at CU
Minimum 40 Upper Division Credit Hours	15 of last 30 Credit Hours or ½ of Major Completed at CU
Minimum 55 Liberal Arts & Science Credit Hours	Retention GPA 2.0; Cameron GPA 2.0
Minimum 30 Credit Hours in Residence at CU	Complete Graduation Application Online

Embedded Certificate Requirements: Cybersecurity (214)
(Embedded in Bachelor of Science in Information Technology)
School of Arts and Sciences
Department of Computing and Mathematical Sciences
Catalog Year: 2025-2027

Embedded Certificate Requirements (32 hours)
Required Courses (17 hours)
IT 1013 Introduction to Computer Systems (FA, SP)
IT 1063 Introduction to Networking (FA, SP)
IT 1414/L Programming I/Lab (SP) **OR** CS 1314/L Computer Science I/Lab (FA, SP)
IT 2064/L Internetworking Technologies/Lab (FA, SP)
IAS 2233 Introduction to Information Assurance/Security (FA, SP)
***15 Hours from the following courses**:*
IT 1733 Linux/Unix/Windows
IAS 2333 Computer Forensics
IAS 3063 Information Assurance Networking Fundamentals
IAS 3233 E-Commerce and Web Security
IAS 3263 Security Architecture and Design
IAS 4063 Current Topics: Information Assurance/Network Security
Graduation Requirements
Retention GPA 2.0
Cameron GPA 2.0
Minimum of 8 Credit Hours in Residence at CU

DEPARTMENT OF MILITARY SCIENCE

FACULTY

CHAIR–MAJ Christopher McWhirter, Professor
INSTRUCTORS–G. Chambers, SFC E. Garcia, MSG H. Pettigrew

MISSION STATEMENT

Partners with Cameron University and Fort Sill to recruit, educate, develop, and inspire Senior ROTC Cadets in order to commission officers of character for the Total Army who are critical thinkers and ready to lead in complex operating environments. Partners with JROTC programs in Southwest Oklahoma and Northern Texas to develop citizens of character.

PROGRAMS OF STUDY

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, 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. To qualify for enrollment in the Advanced Course, a student must complete 8 hours of Basic Course credit, 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 Basic Camp, MSL 2002-8, Leader's Training Course. Students receive a subsistence allowance while attending Basic Camp (MSL 2002-8).

MS I (Freshman Year)

Course	Hours
MSL 1011 Foundations of Officership Lab	1
MSL 1012 Foundations of Officership	2
MSL 1021 Basic Leadership Lab	1
MSL 1022 Basic Leadership	2

MS II (Sophomore Year)

Course	Hours
MSL 2011 Individual Leadership Lab	1
MSL 2012 Individual Leadership Studies	2
MSL 2021 Leadership and Teamwork Lab	1
MSL 2022 Leadership and Teamwork	2
MSL 2002-8 Ldr's Training Course (Basic Camp)(SU)	.2-8

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 two 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

The Advanced Course, consists of MSL 3013, 3023, 4004, 4013 and 4023. Cadets normally attend Advanced Camp (MSL 4004 Cadet Leader Course) 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 Advanced Camp, 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.

MS III (Junior Year)

Course	Hours
MSL 3011 Leadership and Problem Solving Lab	1
MSL 3013 Leadership and Problem Solving	3
MSL 3021 Leadership and Ethics Lab	1
MSL 3023 Leadership and Ethics	3

MS IV (Senior Year)

Course	Hours
MSL 4004 Cadet Leader Course (Advanced Camp) (SU)	.4
MSL 4011 Leadership Challenges/Goal Setting Lab	1
MSL 4013 Leadership Challenges and Goal Setting	3
MSL 4021 Officership Lab	1
MSL 4023 Officership	3

Completion of the Basic Course, Advanced Camp, 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 a class in American Military History, in addition to the University's general education requirement.

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 allows students to get out of the classroom and apply the skills they have learned in fast-paced exercises. Enrollment 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.

Physical Fitness
Cameron University students requiring elective Physical Education credit may elect to take the Physical Training Military Science Level (MSL) 1112 for 2 credit hours. Taking this class does not require a student to take any other Military Science class. Class is typically four mornings a week from 0600-0700. All ROTC Cadets will take MSL 1110 or 1112 each semester that they are enrolled in the program.

COURSE DESCRIPTIONS

Course descriptions for the following course prefix offered in the department are located at the end of the catalog: Military Science and Leadership (MSL).

GENERAL INFORMATION

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 four-year Army scholarships during their senior year in high school, or three- and two-year scholarships after they enroll in the University. Qualified students may apply for Airborne, Air Assault, and other military training conducted during the summer.

STUDENT ORGANIZATION

Military Science Club–The Military Science Club is an organization dedicated to bringing both civilian students and military students together to discuss the military and the science that accompanies it. Activities include academic trips, volunteering opportunities, scholarships, as well as leadership prospects. Membership within the Military Science Club does not require enrollment in a military science class of any kind. The club encourages leadership, teamwork, hard work, camaraderie, and honoring all those who served.

COURSE DESCRIPTIONS

Course Subject Key

ACCT Accounting, Department of Business
AGRC Agriculture, Department of Agriculture, Biology and Health Sciences
AGRN Agronomy, Department of Agriculture, Biology and Health Sciences
AHS Allied Health Sciences, Department of Agriculture, Biology and Health Sciences
ALBN Albanian, Department of Communication, English, and Foreign Languages
ANIM Animal Science, Department of Agriculture, Biology and Health Sciences
ARBC Arabic, Department of Communication, English, and Foreign Languages
ART Art, Department of Art, Music, and Theatre Arts
ASTR Astronomy, Department of Chemistry, Physics, and Engineering
BIOL Biology, Department of Agriculture, Biology and Health Sciences
BUS Business, Department of Business
CAD Computer Aided Drafting, Department of Computing and Mathematical Sciences
CD Child Development, Department of Education
CHEM Chemistry, Department of Chemistry, Physics, and Engineering
CHNS Chinese, Department of Communication, English, and Foreign Languages
CIS Computer Information Systems, Department of Computing and Mathematical Sciences
CJ Criminal Justice, Department of Social Sciences
CLSC Classics, Department of Communication, English, and Foreign Languages
CMCH Comanche Language, Department of Communication, English, and Foreign Languages
COMM Communication, Department of Communication, English, and Foreign Languages
CS Computer Science, Department of Computing and Mathematical Sciences
CTLN Catalan, Department of Communication, English, and Foreign Languages
DARI Dari, Department of Communication, English, and Foreign Languages
DTCH Dutch, Department of Communication, English, and Foreign Languages
ECE Early Childhood Education, Department of Education
ECON Economics, Department of Business
EDUC Education, Department of Education
ENGL English, Department of Communication, English, and Foreign Languages
ENGR Engineering, Department of Chemistry, Physics, and Engineering
ENSC Environmental Science, Department of Agriculture, Biology and Health Sciences
ESCI Earth Science, Department of Agriculture, Biology and Health Sciences
FAMS Family Science, Department of Psychology
FIN Finance, Department of Business
FNAR Fine Arts, Department of Art, Music, and Theatre Arts
FREN French, Department of Communication, English, and Foreign Languages
GEOG Geography, Department of Social Sciences
GERM German, Department of Communication, English, and Foreign Languages
HIST History, Department of Social Sciences
IAS Cyber Security and Information Assurance, Department of Computing and Mathematical Sciences
IT Information Technology, Department of Computing and Mathematical Sciences
ITAL Italian, Department of Communication, English, and Foreign Languages
JOUR Journalism, Department of Communication, English, and Foreign Languages
JRMP Journalism and Media Production, Department of Communication, English, and Foreign Languages
LANG Language, Department of Communication, English, and Foreign Languages
LATN Latin, Department of Communication, English, and Foreign Languages
LIBS Library Science, Department of Education
LING Linguistics, Department of Communication, English, and Foreign Languages
MATH Mathematics, Department of Computing and Mathematical Sciences
MGMT Management, Department of Business
MIS Management Information Systems, Department of Computing and Mathematical Sciences
MKTG Marketing, Department of Business
MLS Medical Laboratory Science, Department of Agriculture, Biology and Health Sciences
MSL Military Science and Leadership, Department of Military Science
MUSC Music, Department of Art, Music, and Theatre Arts
ORGL Organizational Leadership, Department of Business
PBRL Public Relations, Department of Communication, English, and Foreign Languages
PE Physical Education Activity, Department of Sports and Exercise Science
PHIL Philosophy, Department of Social Sciences
PHTO Pashto, Department of Communication, English, and Foreign Languages
PHYS Physics, Department of Chemistry, Physics, and Engineering
PLSH Polish, Department of Communication, English,

and Foreign Languages

PORT Portuguese, Department of Communication, English, and Foreign Languages

PRSN Persian (Farsi), Department of Communication, English, and Foreign Languages

PRWR Professional Writing, Department of Communication, English, and Foreign Languages

PS Political Science, Department of Social Sciences

PSCI Physical Science, Department of Chemistry, Physics, and Engineering

PSY Psychology, Department of Psychology

RAD Radiologic Technology, Department of Agriculture, Biology and Health Sciences

RESP Respiratory Care, Department of Agriculture, Biology and Health Sciences

ROMN Romanian, Department of Communication, English, and Foreign Languages

RTV Radio/Television, Department of Communication, English, and Foreign Languages

RUSN Russian, Department of Communication, English, and Foreign Languages

SES Sports and Exercise Science, Department of Sports and Exercise Science

SMLI Somali, Department of Communication, English, and Foreign Languages

SOCI Sociology, Department of Social Sciences

SPAN Spanish, Department of Communication, English, and Foreign Languages

SPED Special Education, Department of Education

STAT Statistics, Department of Computing and Mathematical Sciences

SWLI Swahili, Department of Communication, English, and Foreign Languages

TECH Technology, Department of Computing and Mathematical Sciences

THTR Theatre Arts, Department of Art, Music, and Theatre Arts

TURK Turkish, Department of Communication, English, and Foreign Languages

UNIV Office of Teaching and Learning

ACCOUNTING (ACCT)

Business

ACCT 2013* PRINCIPLES OF FINANCIAL ACCOUNTING *3 credit hours* 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. (Fall, Spring)

ACCT 2023* PRINCIPLES OF COST/MANAGERIAL ACCOUNTING *3 credit hours* 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. (Fall, Spring)

ACCT 3013 INTERMEDIATE ACCOUNTING I *3 credit hours* 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 2013.

ACCT 3023 INTERMEDIATE ACCOUNTING II *3 credit hours* 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.

ACCT 3113 FRAUD EXAMINATION *3 credit hours* A study of occupational fraud including the pressures that compel potential fraudsters to commit fraud, how fraudsters rationalize their fraudulent acts, and how they find access to business assets. In addition, students will gain in-depth understanding of internal controls necessary to prevent fraud and deter fraudsters. Lecture 3 hours. Prerequisite: ACCT 2023.

ACCT 3133 COST ACCOUNTING *3 credit hours* A review of costing terminology, cost behaviors, job costing, and activity-based costing. The course introduces students to variable costing, process costing, the allocation of joint costs, and accounting for by-product costs. Lecture 3 hours. Prerequisite: ACCT 2023.

ACCT 3313 GOVERNMENTAL ACCOUNTING *3 credit hours* 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.

ACCT 4013 INDIVIDUAL INCOME TAX *3 credit hours* Federal income taxation of individuals; current tax laws and tax return preparation. Lecture 3 hours. Prerequisite: ACCT 2023.

ACCT 4023 CORPORATE INCOME TAX *3 credit hours* Federal taxation of partnerships and corporations; gift and estate taxes. Lecture 3 hours. Prerequisite: ACCT 4013.

ACCT 4113 ADVANCED ACCOUNTING *3 credit hours* Accounting for business combinations, multinational operations, partnerships and insolvent organizations; interim and segmental reporting. Lecture 3 hours. Prerequisite: ACCT 3023.

ACCT 4213 AUDITING *3 credit hours* The theory of and practices used in external audits. Coverage includes: audit planning, generally accepted auditing standards, collection and evaluation of audit evidence, understanding and testing of internal controls, risk assessment, transaction cycles, working papers, audit reports, professional responsibilities, and audit sampling. Lecture 3 hours. Prerequisite: ACCT 3013.

ACCT 4471-3 SEMINAR IN ACCOUNTING *1-3 credit hours* Seminar presentation and special studies in topics of current interest to the accounting professional. Seminar 1-3 hours. Prerequisite: Permission of the Chair.

ACCT 4483 ACCOUNTING INTERNSHIP *3 credit hours* Supervised work experience in an organization. The internship will allow students to encounter practical workplace problems in accounting and gain experience in working in a professional setting. A minimum of 150 hours of on-the-job training is required to complete the course. Internship 3 hours. Prerequisites: 12 credit hours in accounting courses and Junior standing.

ACCT 4513 ACCOUNTING INFORMATION SYSTEMS. *3 credit hours* Structure, flow and use of accounting data and its relationship with other systems in a firm; systems design, analysis, and security issues. Includes an in-depth study of preparing the cash flow statement and the cash flow from operating via direct and indirect methods. Lecture 3 hours. Prerequisite: ACCT 2023 and MIS 3013.

AGRICULTURE (AGRC)

Agriculture, Biology, and Health Sciences

AGRC 1124 INTRODUCTION TO ANIMAL SCIENCE *4 credit hours* 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. Corequisite: AGRC 1124L. (Fall)

AGRC 1124L INTRODUCTION TO ANIMAL SCIENCE LAB *0 credit hours* LAB: 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. Corequisite: AGRC 1124. (Fall)

AGRC 1214 INTRODUCTION TO PLANT SCIENCE *4 credit hours* Factors determining growth, distribution, culture, improvement and utilization of economic plants. Lecture 3 hours, laboratory 2 hours. Corequisite: AGRC 1214L. (Spring)

AGRC 1214L INTRODUCTION TO PLANT SCIENCE LAB *0 credit hours* LAB: Factors determining growth, distribution, culture, improvement and utilization of economic plants. Lecture 3 hours, laboratory 2 hours. Corequisite: AGRC 1214. (Spring)

AGRC 2013* INTRODUCTION TO AGRICULTURAL ECONOMICS *3 credit hours* A study of economic principles as they relate to the national economy, production,

marketing and consumption of agricultural products. Lecture 3 hours. General Education, Economics. (Fall, Spring)

AGRC 2123 PRINCIPLES OF LIVESTOCK FEEDING *3 credit hours* An introductory study of livestock feeding problems. The selection and preparation of feeds for the different classes of livestock. Practical feeding methods, balancing rations for various livestock species. Lecture 3 hours. Prerequisites: AGRC 1124/1124L.

AGRC 2124* FUNDAMENTALS OF SOIL SCIENCE *4 credit hours* 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. Corequisite: AGRC 2124L. (Spring)

AGRC 2124L* FUNDAMENTALS OF SOIL SCIENCE LAB *0 credit hours* LAB: 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. Corequisite: AGRC 2124. (Spring)

AGRC 3001-2 AGRICULTURAL WORKSHOP *1-2 credit hours* A course designed to emphasize innovations in the field of Agriculture. Flexible format to include the use of lectures or demonstrations combined with practical applications, field studies, or other forms of experiential learning. May be repeated with a change in course topic up to a maximum of 4 credit hours. Workshop, 1-2 hours. Prerequisite: Completion of General Education Biological Science **OR** Physical Science requirements.

AGRC 3303 PRINCIPLES OF AGRICULTURAL MARKETING *3 credit hours* Analysis of the marketing system; its importance to the economy and the role of the individual firm. Understanding of basic c33oncepts, problems, and decision aids is emphasized. Lecture 3 hours. Prerequisite: AGRC 2013.

AGRC 3413 FARM AND RANCH MANAGEMENT *3 credit hours* Production planning with budgeting, market planning, financial records, and income tax management for the individual farm-ranch business. Lecture 3 hours. Prerequisite: AGRC 2013.

AGRC 3513 PRINCIPLES OF AGRICULTURAL MANAGEMENT *3 credit hours* An introduction to fundamental concepts associated with management of agribusiness firms, including finance, management, marketing and human resources. Special emphasis will be placed on the development of business plans. Computer applications and simulations will be utilized to model performance of agribusiness firms. Prerequisite: AGRC 2013. (Fall)

AGRC 3613 AGRICULTURAL AND FOOD POLICY *3 credit hours* Applications of economic principles to policy analysis related to agricultural and food issues facing the United States and the world. Includes study of the nature, causes, and effects of governmental participation in agriculture, and the interrelationships of the American agricultural and agribusiness sectors with the political and economic system, public administration, and interest group representation. Prerequisite: AGRC 2013. (Spring)

AGRC 3813 PRECISION AGRICULTURE *3 credit hours* Principles of acquisition and analysis of geographically referenced data for the management of crop and livestock production systems. Topics include: mapping, global positioning systems, geographic information systems, crop modeling, livestock monitoring, applications of technology including fixed wing, single rotor, and multi-rotor drones, and selection of appropriate sensor systems. Field trips are an integral and required part of the course. Lecture 3 hours. Prerequisite: AGRC 1124/1124L or AGRC 1214/1214L or AGRC 2013.

AGRC 4223 INTEGRATED PEST MANAGEMENT *3 credit hours* Management of pests in agricultural situations. Topics include fundamentals of pest management, selection and safe use of herbicides and insecticides, control of weedy species, insect species, rodents, and nuisance wildlife, and regulatory agency considerations. Lecture 3 hours. Prerequisites: AGRC 1124/1124L or AGRC 1214/1214L or AGRC 2013.

AGRC 4321-3 SPECIAL STUDIES IN AGRICULTURE *1-3 credit hours* Independent study based on the review of literature, laboratory problems, or field investigations. Independent study 1-3 hours. Prerequisite: Junior or Senior standing.

AGRC 4333 AGRICULTURAL FINANCE *3 credit hours* An introduction to the planning, analyzing and controlling of business performance in agriculture and on the related financial markets. The topics covered include financial statements, capital structure, capital budgeting, financial markets, and commercial lending for farms and ranches as well as for agribusiness firms. Special emphasis will be placed on liquidity and credit, risk management, financial intermediaries, and outside equity capital. Lecture 3 hours. Prerequisite: AGRC 2013.

AGRC 4421-3 AGRICULTURAL INTERNSHIP *1-3 credit hours* Supervised work experience in a professional setting directly related to a sub-discipline in the field of agriculture. The internship will allow students to encounter practical workplace situations within their major field and gain experience in a business setting. Students may apply up to 3 credit hours of internship credit to a major in agriculture. A minimum of 32 hours of training or work is required per credit hour. Internship 2-6 hours. Prerequisite: Department permission.

AGRC 4572 AGRICULTURAL CAPSTONE *2 credit hours* Required capstone course in the agriculture major. Designed to bring reflection and focus to the whole of the university experience and to encourage students to integrate and synthesize aspects of agriculture with important concepts from related disciplines. Provides resources for careers, professional programs, and graduate school. Includes required program assessment. Capstone/Lecture 2 hours. Prerequisite: Senior standing and departmental permission. (Fall)

AGRONOMY (AGRN)
Agriculture, Biology, and Health Sciences

AGRN 3213 FORAGE, RANGE, AND PASTURE CROPS *3 credit hours* Principles of production management, utilization, and improvement of forages for livestock. Lecture 3 hours. Prerequisites: AGRC 1214/1214L.

AGRN 3312 CROP SCIENCE LABORATORY *2 credit hours* LAB: 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, AGRN 3513, or AGRN 4673.

AGRN 3434* SOIL MORPHOLOGY, GENESIS, AND CLASSIFICATION *4 credit hours* 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 2124/2124L. Corequisite: AGRN 3434L.

AGRN 3434L* SOIL MORPHOLOGY, GENESIS, AND CLASSIFICATION LAB *0 credit hours* LAB: 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 2124/2124L. Corequisite: AGRN 3434.

AGRN 3513 FIBER AND OILSEED CROPS *3 credit hours* Principles of Fiber and oilseed crop production, distribution, classification, and improvement. Lecture 3 hours. Prerequisites: AGRC 1214.

AGRN 4673 GRAIN CROPS *3 credit hours* Principles of grain crop production, classification, and improvement. Lecture 3 hours. Prerequisites: AGRC 1214/1214L.

ALBANIAN (ALBN)
Communication, English, and Foreign Languages

ALBN 4153* INTENSIVE STUDIES IN ALBANIAN *3 credit hours* An intensive introductory study of Albanian combining guided independent study of the written language with regular oral practice of the spoken language. Two hours independent study, one hour lab. Prerequisites: ENGL 1213 and six hours study of another foreign language or permission of the department.

ALLIED HEALTH SCIENCES (AHS)
Agriculture, Biology, and Health Sciences

AHS 1003 INTRODUCTION TO PUBLIC HEALTH *3 credit hours* Introduction to Public Health introduces the major concepts and principles of public health and the options for intervention to promote health and prevent disease. It is not applicable to the Biology major or minor. Lecture 3 hours. Prerequisites: Must be MATH 1513 eligible. (Fall, Spring)

ANIMAL SCIENCE (ANIM)
Agriculture, Biology, and Health Sciences

ANIM 3103 LIVESTOCK EVALUATION *3 credit hours* Instruction in selection, evaluating, fitting, showing, and judging of multiple species of commercial livestock. Lecture 2 hours, laboratory 2 hours. Prerequisite: AGRC 1124/1124L. Corequisite: ANIM 3103L.

ANIM 3103L LIVESTOCK EVALUATION LAB *0 credit hours* LAB: Instruction in selection, evaluating, fitting, showing, and judging of multiple species of commercial livestock. Lecture 2 hours, laboratory 2 hours. Prerequisite: AGRC 1124/1124L. Corequisite: ANIM 3103.

ANIM 3133 BREEDS OF LIVESTOCK *3 credit hours* Study of the origin, history, development and characteristics of livestock breeds and of the specific purposes of each breed. Lecture 3 hours. Prerequisite: AGRC 1124/1124L. (Fall)

ANIM 3143 EQUINE SCIENCE *3 credit hours* Scientific principles of equine anatomy, physiology, genetics, reproduction, breeding, nutrition, and health; current management practices based on these principles. Overview of the equine industry including career choices. Lecture 3 hours. Prerequisite: AGRC 1124/1124L.

ANIM 3653 PRINCIPLES OF ANIMAL NUTRITION *3 credit hours* 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 3 hours. Prerequisites: AGRC 1124/1124L.

ANIM 4113 BEEF CATTLE SCIENCE *3 credit hours* 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: AGRC 1124/1124L. Corequisite: ANIM 4113L.

ANIM 4113L BEEF CATTLE SCIENCE LAB *0 credit hours* LAB: 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: AGRC 1124/1124L. Corequisite: ANIM 4113.

ANIM 4123 SWINE SCIENCE *3 credit hours* 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: AGRC 1124/1124L. Corequisite: ANIM 4123L.

ANIM 4123L SWINE SCIENCE LAB *0 credit hours* LAB: 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 AGRC 1124/1124L. Corequisite: ANIM 4123.

ANIM 4133 SHEEP SCIENCE *3 credit hours* Breeding, feeding, management, and marketing of commercial and purebred sheep. Lecture 2 hours, laboratory 2 hours. Prerequisites: AGRC 1124/1124L. Corequisite: ANIM 4133L.
ANIM 4133L SHEEP SCIENCE LAB *0 credit hours* LAB: Breeding, feeding, management, and marketing of commercial and purebred sheep. Lecture 2 hours, laboratory 2 hours. Prerequisites: AGRC 1124/1124L. Corequisite: ANIM 4123.
ANIM 4333* PHYSIOLOGY OF DOMESTIC ANIMALS *3 credit hours* The comparative physiology of digestion, circulation, production, reproduction and environment of farm animals. Lecture 3 hours. Prerequisites: AGRC 1124/1124L.
ANIM 4423 LIVESTOCK DISEASES AND SANITATION *3 credit hours* The recognition and study of common diseases and parasitic infestations together with their prevention and control in domestic animals. Lecture 3 hours. Prerequisite: AGRC 1124/1124L.
ANIM 4434 ANIMAL REPRODUCTION *4 credit hours* 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 1124/1124L. Corequisite: ANIM 4434L.
ANIM 4434L ANIMAL REPRODUCTION LAB *0 credit hours* LAB: 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 1124/1124L. Corequisite: ANIM 4434.

ARABIC (ARBC)

Communication, English, and Foreign Languages

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. General Education, Humanities–Diversity. (Fall)
ARBC 1223* BEGINNING MODERN STANDARD ARABIC II *3 credit hours* Continuation of ARBC 1113. Lecture 3 hours. Prerequisite: ARBC 1113 or equivalent. General Education, Humanities–Diversity. (Spring)
ARBC 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. Prerequisite: ARBC 1223 or equivalent. (Fall)
ARBC 2223* INTERMEDIATE MODERN STANDARD ARABIC II *3 credit hours* Continuation of ARBC 2113. Lecture 3 hours. Prerequisite: ARBC 2113 or the equivalent. (Spring)
ARBC 3113* ADVANCED MODERN STANDARD ARABIC I *3 credit hours* An advanced course in the language and culture of the Arabic-speaking countries. Lecture 3 hours. Prerequisite: ARBC 2223 or the equivalent. (Fall)
ARBC 3223* ADVANCED MODERN STANDARD ARABIC II *3 credit hours* A continuation of ARBC 3113. Lecture 3 hours. Prerequisite: ARBC 3113 or equivalent. (Spring)
ARBC 4961-3* DIRECTED READINGS IN MODERN STANDARD ARABIC *1-3 credit hours* This course provides an opportunity for students to work on individualized topics in Arabic language, linguistics, and literature. Course may be repeated to a total of six hours with departmental permission. Independent study/directed readings 1-3 hours. Prerequisite: ARBC 3223 or equivalent.

ART (ART)

Art, Music, and Theatre Arts

ART 1013* ART APPRECIATION *3 credit hours* An introduction to various aspects of the visual arts with illustrated lectures and studio demonstrations. Lecture 3 hours. General Education, Humanities–Aesthetics.
ART 1023* FUNDAMENTALS OF ART *3 credit hours* An introduction to art through studio experience for non-majors. Studio 6 hours.
ART 1031-3 WORKSHOP *1-3 credit hours* 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.
ART 1113* DRAWING I *3 credit hours* Introduction to the basic principles, techniques and media of drawing/perception. Studio 6 hours. (Fall)
ART 1123 DRAWING II *3 credit hours* Drawing experiences that coordinate drawing skills with perception and creativity. Studio 6 hours. Prerequisite: ART 1113 or Permission of instructor. (Spring)
ART 1213* DESIGN I *3 credit hours* An introductory class concentrating on two and three dimensional forms which emphasizes design elements and their organizational principles. Studio 6 hours. (Fall)
ART 1223 DESIGN II *3 credit hours* Application and analysis of three-dimensional elements and principles of design. Studio 6 hours. (Spring)
ART 1231 COMPUTER-STUDIO LAB *1 credit hour* An introduction to computer graphics and appropriate software for use in foundation studio art courses. For Art majors only. Studio 2 hours per week. (Fall)
ART 2243* COLOR *3 credit hours* Exploration and analysis of color. Studio 6 hours. (Fall)
ART 2253 COMPUTER GRAPHIC DESIGN *3 credit hours* 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 per week.

ART 2313 PAINTING *3 credit hours* Painting courses exploring the principles, techniques, media and creative potential of painting. Studio 6 hours.

ART 2413 PRINTMAKING *3 credit hours* An introduction to various basic printmaking processes: collagraphs, monoprints, intaglio, serigraphy, lithography, relief printing. Studio 6 hours. Prerequisite: ART 1113, ART 1123, and ART 2243.

ART 2513 SCULPTURE *3 credit hours* A beginning class that emphasizes sculptural form and aesthetics through various media and techniques. Studio 6 hours. Prerequisite: ART 1213.

ART 2613* HISTORY OF ART I *3 credit hours* A survey of the painting, sculpture and architecture from prehistoric times through the Gothic period. Lecture 3 hours. General Education, Humanities–Aesthetics. (Fall)

ART 2623* HISTORY OF ART II *3 credit hours* A survey of the painting, sculpture and architecture from the Renaissance through the 20th Century. Lecture 3 hours. General Education, Humanities–Aesthetics. (Spring)

ART 2743 TYPOGRAPHY *3 credit hours* 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.

ART 2813 BEGINNING CERAMICS *3 credit hours* Introduction to ceramic techniques, with focus on exploration, ideas, and the aesthetics of form. Studio 6 hours.

ART 3133 FIGURE DRAWING *3 credit hours* An introduction to drawing the figure from direct observation. Emphasis on a variety of traditional drawing media and techniques. Studio 6 hours per week. Prerequisite: ART 1113 and ART 1123. (Fall)

ART 3213 GRAPHIC DESIGN *3 credit hours* 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.

ART 3713 ART FOR ELEMENTARY TEACHERS *3 credit hours* 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.

ART 3723 PUBLIC SCHOOL ART *3 credit hours* 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.

ART 3733 ILLUSTRATION *3 credit hours* 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.

ART 3743 ADVANCED COMPUTER GRAPHICS AND IMAGE ENHANCEMENT *3 credit hours* Use of computer software (primarily Photoshop) 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. Prerequisite: ART 3213.

ART 3753 LAYOUT/PRODUCTION *3 credit hours* 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.

ART 3833 CRAFTS *3 credit hours* 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.

ART 4143 ADVANCED DRAWING *3 credit hours* Advanced studio courses exploring the principles, techniques, media and creative potential of drawing. May be repeated for credit under a different subtitle. Studio 6 hours. Prerequisite: ART 1113 and ART 1123. (Spring)

ART 4213 ADVANCED GRAPHIC DESIGN *3 credit hours* Design problems with special attention to signage, exhibition design, packaging, display, and point of purchase. Use of model-building tools and study of structure and form to introduce the student to problem-solving and finishing techniques. Development of concepts into models. Studio 6 hours. Prerequisite: ART 3213.

ART 4323 ADVANCED PAINTING I: TRADITIONAL PAINTING TECHNIQUES *3 credit hours* Students will continue to apply and further refine the traditional oil painting techniques learned in ART 2313. These techniques include imprimatura, grisaille, glazing, direct painting, impasto, and alla prima. Additional emphasis will be placed on composition and individual expression. Studio 6 hours. Prerequisite: ART 2243 and ART 2313.

ART 4333 ADVANCED PAINTING II: CONTEMPORARY PAINTING TECHNIQUES *3 credit hours* Students will explore and experiment with contemporary oil and/or acrylic painting techniques. This may include creative and inventive use of traditional materials as well as use of nontraditional surfaces, mixed media, collage, and expanded form painting. Studio 6 hours. Prerequisite: ART 2243 and ART 2313.

ART 4343 ADVANCED PAINTING III: SUBJECT MATTER EXPLORATION *3 credit hours* Students will focus on the creative exploration of personal subject matter using oil and/or acrylic paint. Subject matter may include portraits, the figure, still life, landscape, and interiors. Students will continue to refine their painting techniques in relation to their subject matter. Students will research historical and contemporary genres in painting. Studio 6 hours. Prerequisite: ART 2243 and ART 2313.

ART 4353 ADVANCED PAINTING IV: STYLE EXPLORATION *3 credit hours* Students will explore a variety of painting styles using oil and/or acrylic paint. Styles may include realism, abstraction, surrealism, and narrative painting. Students will research artists working in a variety of historical and contemporary styles. Emphasis is placed on the union of style with personal subject matter. Studio 6 hours. Prerequisite: ART 2243 and ART 2313.

ART 4363 ADVANCED PAINTING V: PAINTING THESIS INTRODUCTION *3 credit hours* Students will develop a series of related oil and/or acrylic paintings demonstrating creativity and a personal aesthetic and direction in painting. Emphasis is placed on the development of a unique concept and the application of technique, design, style, and subject matter in relation to concept. Students will also complete in-depth formal and critical analyses of their paintings. Paintings created in this course will be part of the student's senior art exhibition. Required for all BFA majors with a painting concentration. Studio 6 hours. Prerequisite: ART 2243 and ART 2313.

ART 4373 ADVANCED PAINTING V: PAINTING THESIS CONCLUSION *3 credit hours* Students will continue to develop and refine a series of related paintings as well as an artist statement in preparation for their senior art exhibition. Continued focus is on the development of paintings that demonstrate a unique concept and mature vision enhanced by creative use of subject matter, skilled paint application, and sophisticated design skills. Students will also complete in-depth formal and critical analyses of their paintings. Required for all BFA majors with a painting concentration. Studio 6 hours. Prerequisite: ART 2243 and ART 2313.

ART 4383 ADVANCED PAINTING: TRADITIONAL WATERCOLOR *3 credit hours* Students will explore the techniques and traditional methods of watercolors on paper. Subject matter will include landscapes, plein air painting, portraits, the figure, still life, and a variety of color mixing charts related to subject. Studio 6 hours. Prerequisite: ART 2243 and ART 2313.

ART 4393 ADVANCED PAINTING: CONTEMPORARY WATERCOLOR *3 credit hours* Students will focus on experimentation and personal expression of subject matter using watercolor on traditional or nontraditional surfaces. Students will continue to refine their painting techniques in relation to their concept. Studio 6 hours. Prerequisite: ART 2243 and ART 2313.

ART 4423 ADVANCED PRINTMAKING I *3 credit hours* Students will be introduced to various advanced techniques in printmaking methods which will include stone lithography, serigraphy, relief, and monoprints/monotype. Emphasis will be placed on learning and understanding the many techniques of printmaking. Students are required to take this course for a concentration in printmaking. Studio 6 hours. Prerequisite: ART 2413.

ART 4433 ADVANCED PRINTMAKING II: WOODCUT *3 credit hours* Students will focus on the techniques and methods of woodcut. Emphasis will be placed on learning to carve, matrix registration, and applying color to the block while simultaneously developing personal imagery. Students will learn how to create a consistent edition. Studio 6 hours. Prerequisite: ART 2413.

ART 4443 ADVANCED PRINTMAKING III: SERIGRAPHY *3 credit hours* Students will focus on the techniques and methods of screen printing. Emphasis will be placed on how to prepare and print a screen print with equal attention to personal imagery. Students will learn how to create a consistent edition. Studio 6 hours. Prerequisite: ART 2413.

ART 4453 ADVANCED PRINTMAKING IV: MONOPRINT/MONOTYPE *3 credit hours* Students will focus on developing personal imagery using painting and printmaking techniques. Drypoint, collograph, and painting will be utilized in developing one of a kind images and personal imagery. Studio 6 hours. Prerequisite: ART 2413.

ART 4463 ADVANCED PRINTMAKING V: RELIEF LINOCUT *3 credit hours* Students will continue to explore relief printing using a linoleum matrix. Reduction and additive methods will be used to create personal imagery. Students will learn how to create a consistent edition. Studio 6 hours. Prerequisite: ART 2413.

ART 4473 ADVANCED PRINTMAKING VI: LITHOGRAPHY AND RELIEF *3 credit hours* Students will continue to develop and explore the techniques of stone lithography and relief printing. Students will learn how to create a consistent color edition. Studio 6 hours. Prerequisite: ART 2413.

ART 4483 ADVANCED PRINTMAKING VII: LITHOGRAPHY *3 credit hours* Students will focus on the techniques and methods of stone lithography. Emphasis will be placed on learning the chemical etching process and developing personal imagery. Students will learn how to create a consistent edition. Studio 6 hours. Prerequisite: ART 2413.

ART 4523 ADVANCED SCULPTURE I: WELDING, ASSEMBLAGE, CARVING *3 credit hours* Advanced studio course emphasizing safe studio practices and the personal exploration of sculptural forms and materials. Students will learn advanced skills to create sculpture using the techniques of oxy-acetylene welding, arc stick welding, wood-assemblage, wood carving, and hand building in clay. Studio 6 hours. Prerequisite: ART 2513.

ART 4533 ADVANCED SCULPTURE II: TIG WELDING AND HAND BUILDING CLAY *3 credit hours* Advanced studio course emphasizing safe studio practices and the personal exploration of sculptural forms and materials. Students will engage in self-directed image making and create personal sculptural expressions for their portfolio. Studio workshop skills using advanced techniques of TIG welding and hand building in clay will be developed. Studio 6 hours. Prerequisite: ART 2513.

ART 4543 ADVANCED SCULPTURE III: SPECIAL PROBLEMS IN WELDING, WOOD, AND CLAY *3 credit hours* Advanced studio course emphasizing safe studio practices and the personal exploration of sculptural forms and materials. Students will engage in special problems in sculpture. Each student will design an original sculpture and construct an advanced portfolio of their work. Studio workshop skills will build upon the advanced techniques of TIG welding, arc welding, plasma arc cutting, and oxy-acetylene welding in addition to further development of their advanced skills in woodworking and clay construction. Studio 6 hours. Prerequisite: ART 2513.

ART 4553 ADVANCED SCULPTURE IV: TIME BASED MEDIA, ASSEMBLAGE, CARVING, CASTING, OR MODELING *3 credit hours* Advanced studio course emphasizing safe studio practices and the personal exploration of sculptural forms and materials. Students will engage in new forms of sculpture. Each student will design original sculpture and construct advanced portfolios of their work using a variety of new materials including time-based media. Studio workshop skills will be stressed in all sculpture media and include works that are carved, assembled, cast, or modeled. Studio 6 hours. Prerequisite: ART 2513.

ART 4563 ADVANCED SCULPTURE V: PUBLIC INSTALLATION SCULPTURE *3 credit hours* Advanced studio course emphasizing safe studio practices and the personal exploration of sculptural forms and materials. Students will engage in new forms of sculpture. Each student will design original sculpture for public display. Studio 6 hours. Prerequisite: ART 2513.

ART 4573 ADVANCED SCULPTURE VI: EXHIBITION DESIGN AND CONSTRUCTION *3 credit hours* Advanced studio course emphasizing safe studio practices and the personal exploration of sculptural forms and materials. Students will engage in new forms of sculpture. Each student will design original sculpture and construct an advanced exhibition of their work. Studio 6 hours. Prerequisite: ART 2513.

ART 4633* HISTORY OF ART SEMINAR: ORIGINS OF MODERN ART *3 credit hours* Advanced Art History course with an emphasis on origins and development of Modern Art. The course content covers the time period of 1870-1910. Lecture 3 hours. Prerequisites: ENGL 1213 and 3 hours of History. (Spring)

ART 4643* HISTORY OF ART SEMINAR: MODERN ART MOVEMENTS *3 credit hours* Advanced Art History course with an emphasis on Modern Art movements and their development. The course content covers the time period of 1910-1940. Lecture 3 hours. Prerequisites: ENGL 1213 and 3 hours of History. (Fall, Even Years)

ART 4653* HISTORY OF ART SEMINAR: ART SINCE 1940 *3 credit hours* Advanced Art History course with an emphasis on art since 1940. The course content covers the time period of 1940-1980. Lecture 3 hours. Prerequisites: ENGL 1213 and 3 hours of History.

ART 4713 HISTORY OF GRAPHIC DESIGN *3 credit hours* 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.

ART 4733 INTERNSHIP/ART PORTFOLIO *3 credit hours* Professional study on setting fees, writing contracts, working with an agent, and other business practices. Final preparation of a professional portfolio culminating in an extensive design project and the design, organization, and production of an exhibition of work. Studio/internship 6 hours. Prerequisites: ART 3213, ART 3743, and ART 4213.

ART 4823 ADVANCED CERAMICS *3 credit hours* Advanced studio courses in the application of clay techniques emphasizing the aesthetics of form. May be repeated for credit under a different subtitle. Studio 6 hours. Prerequisite: ART 2813.

ART 4911-4 WORKSHOP *1-4 credit hours* 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.

ART 4921-3* INDEPENDENT STUDY *1-3 credit hours* Independent study and guided research in a selected area of Art. May be repeated for credit. Independent study 1-3 hours. Prerequisite: Permission of the Chair.

ART 4933 SENIOR ART STUDIO *3 credit hours* Senior level art experience in a major studio area. May be repeated for credit. Studio 6 hours, as assigned by department chair. Prerequisites: Senior standing in Art and permission of the Chair.

ART 4991 SENIOR ART CAPSTONE AND EXHIBITION *1 credit hour* A capstone course that emphasizes the development and documentation of professional credentials and culminates in a final exhibition of art. Capstone 1 hour. Prerequisite: Senior standing in Art. (Spring)

ASTRONOMY (ASTR)

Chemistry, Physics, and Engineering

ASTR 1104* CONTEMPORARY ASTRONOMY *4 credit hours* 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. General Education, Physical Science.

BIOLOGY (BIOL)

Agriculture, Biology, and Health Sciences

BIOL 1004* GENERAL BIOLOGY *4 credit hours* 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 the Biology major or minor, Medical Technology major, or Allied Health Science major. Lecture 3 hours, laboratory 2 hours. Prerequisites: Student must be eligible to take MATH 1413 or higher. Corequisite: BIOL 1004L. General Education Laboratory Science, Biological Science.

BIOL 1004L* GENERAL BIOLOGY LAB *0 credit hours* LAB: 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 the Biology major or minor, Medical Technology major, or Allied Health Science major. Lecture 3 hours, laboratory 2 hours. Prerequisites: Student must be eligible to take MATH 1413 or higher. Corequisite: BIOL 1004. General Education Laboratory Science, Biological Science.

BIOL 1114* PLANTS AND CULTURE *4 credit hours* A general education course that will explore the historical, social, and economic relationships between plants and people. Topics covered in class include a brief introduction to the plant kingdom and plant anatomy and morphology with more in depth coverage of human plant usage including foods, beverages, spices, fibers, and medicines. The lab portion of the course will in part involve hands-on production of plant products, and where appropriate (and legal) include sampling these products. Not applicable to biology major or minor or medical technology major. Lecture 3 hours, laboratory 2 hours. Corequisite: BIOL 1114L. General Education Laboratory Science, Biological Science.

BIOL 1114L* PLANTS AND CULTURE LAB *0 credit hours* LAB: A general education course that will explore the historical, social, and economic relationships between plants and people. Topics covered in class include a brief introduction to the plant kingdom and plant anatomy and morphology with more in depth coverage of human plant usage including foods, beverages, spices, fibers, and medicines. The lab portion of the course will in part involve hands-on production of plant products, and where appropriate (and legal) include sampling these products. Not applicable to biology major or minor or medical technology major. Lecture 3 hours, laboratory 2 hours. Corequisite: BIOL 1114. General Education Laboratory Science, Biological Science.

BIOL 1214* HUMAN BIOLOGY *4 credit hours* Human Biology is a general education science lab course that introduces the basic concepts of biology, using humans and society as a focus. After establishing the molecular and cellular basis of life, the course describes and investigates the structure and function of the human body with an emphasis on homeostasis. It concludes with an examination of the principles of evolution and ecology, again focusing on human impact on the environment. It is not applicable to the Biology major or minor. Lecture 3 hours, laboratory 2 hours. Prerequisites: Student must be eligible to take MATH 1513. Corequisite: BIOL 1214L. General Education Laboratory Science, Biological Science.

BIOL 1214L* HUMAN BIOLOGY LAB *0 credit hours* LAB: Human Biology is a general education science lab course that introduces the basic concepts of biology, using humans and society as a focus. After establishing the molecular and cellular basis of life, the course describes and investigates the structure and function of the human body with an emphasis on homeostasis. It concludes with an examination of the principles of evolution and ecology, again focusing on human impact on the environment. It is not applicable to the Biology major or minor. Lecture 3 hours, laboratory 2 hours. Prerequisites: Student must be eligible to take MATH 1513. Corequisite: BIOL 1214. General Education Laboratory Science, Biological Science.

BIOL 1364* PRINCIPLES OF BIOLOGY I *4 credit hours* An introduction to the physical, chemical and biological principles associated with life from the subcellular to ecosystem level. Lecture 3 hours, laboratory 3 hours. Prerequisites: Student must be eligible to take MATH 1513. Corequisite: BIOL 1364L. General Education Laboratory Science, Biological Science. (Fall, Spring)

BIOL 1364L* PRINCIPLES OF BIOLOGY I LAB *0 credit hours* LAB: An introduction to the physical, chemical and biological principles associated with life from the subcellular to ecosystem level. Lecture 3 hours, laboratory 3 hours. Prerequisites: Student must be eligible to take MATH 1513. Corequisite: BIOL 1364. General Education Laboratory Science, Biological Science. (Fall, Spring)

BIOL 1474* PRINCIPLES OF BIOLOGY II *4 credit hours* A continuation of BIOL 1364. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1364/1364L. Corequisite: BIOL 1474L. Will not satisfy general education science requirements. (Fall, Spring)

BIOL 1474L* PRINCIPLES OF BIOLOGY II LAB *0 credit hours* LAB: A continuation of BIOL 1364. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1364/1364L. Corequisite: BIOL 1474. Will not satisfy general education science requirements. (Fall, Spring)

Biological Science courses at the 2000-, 3000-, or 4000-level **may not** be used to fulfill General Education science requirements.

BIOL 2013 MEDICAL TERMINOLOGY *3 credit hours* 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 3 hours. Will not satisfy general education science requirements. (Fall, Spring, Summer)

BIOL 2034* HUMAN ANATOMY *4 credit hours* Introductory anatomy with emphasis on histology and human gross anatomy. Includes cadaver dissection and study. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1004/1004L or 1214/1214L or 1364/1364L. Corequisite: BIOL 2034L. Student must be eligible to take MATH 1513 or higher. Will not satisfy general education science requirements. (Fall, Spring)

BIOL 2034L* HUMAN ANATOMY LAB *0 credit hours* LAB: Introductory anatomy with emphasis on histology and human gross anatomy. Includes cadaver dissection and study. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1004/1004L or 1214/1214L or 1364/1364L. Corequisite: BIOL 2034. Student must be eligible to take MATH 1513 or higher. Will not satisfy general education science requirements. (Fall, Spring)

BIOL 2121-2 SPECIAL STUDIES *1-2 credit hours* Selected topics in biology which may include lecture, laboratory and/or field trips. May be repeated for a maximum of 3 credit hours. Lecture 1-2 hours. Will not satisfy general education science requirements.

BIOL 2124* MICROBIOLOGY *4 credit hours* A survey of the principles and techniques of microbiology with emphasis on disease prevention and health maintenance. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 1004/1004L or BIOL 1214/1214L or BIOL 1364/1364L or AGRC 1124/1124L and AGRC 1214/1214L and CHEM 1105/1105L or CHEM 1364/1361, and MATH 1513 or higher. Corequisite: BIOL 2124L. Will not satisfy general education science requirements.

BIOL 2124L* MICROBIOLOGY LAB *0 credit hours* LAB: A survey of the principles and techniques of microbiology with emphasis on disease prevention and health maintenance. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 1004/1004L or BIOL 1214/1214L or BIOL 1364/1364L or AGRC 1124/1124L and AGRC 1214/1214L and CHEM 1105/1105L or CHEM 1364/1361, and MATH 1513 or higher. Corequisite: BIOL 2124. Will not satisfy general education science requirements.

BIOL 2134* HUMAN PHYSIOLOGY *4 credit hours* 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: CHEM 1105/1105L or CHEM 1364/1361, and MATH 1513 or higher, and BIOL 2034/2034L or both BIOL 1364/1364L and BIOL 1474/1474L. Corequisite: BIOL 2134L. Will not satisfy general education science requirements. (Fall, Spring)

BIOL 2134L* HUMAN PHYSIOLOGY LAB *0 credit hours* LAB: 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: CHEM 1105/1105L or CHEM 1364/1361, and MATH 1513 or higher, and BIOL 2034/2034L or both BIOL 1364/1364L and BIOL 1474/1474L. Corequisite: BIOL 2134. Will not satisfy general education science requirements. (Fall, Spring)

BIOL 2144* BOTANY *4 credit hours* A survey of the plant kingdom stressing structure, function, life histories, and ecology. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1474/1474L or AGRC 1124/1124L and AGRC 1214/1214L. Corequisite: BIOL 2144L. Will not satisfy general education science requirements. (Spring)

BIOL 2144L* BOTANY LAB *0 credit hours* LAB: A survey of the plant kingdom stressing structure, function, life histories, and ecology. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 1474/1474L or AGRC 1124/1124L and AGRC 1214/1214L. Corequisite: BIOL 2144. Will not satisfy general education science requirements. (Spring)

BIOL 2154* ZOOLOGY *4 credit hours* 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 1474/1474L or AGRC 1124/1124L and AGRC 1214/1214L. Corequisite: BIOL 2154L. Will not satisfy general education science requirements. (Fall)

BIOL 2154L* ZOOLOGY LAB *0 credit hours* LAB: 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 1474/1474L or AGRC 1124/1124L and AGRC 1214/1214L. Corequisite: BIOL 2154. Will not satisfy general education science requirements. (Fall)

BIOL 3012* PRACTICUM IN HUMAN ANATOMY *2 credit hours* Students will serve as a teaching assistant for BIOL 2034L Human Anatomy Lab and will obtain additional dissection experience and anatomical knowledge beyond

material covered in that course. Prerequisites: Grade of "A" or "B" in BIOL 2034 or BIOL 3104 and permission of instructor and department chair. Will not satisfy general education science requirements.

BIOL 3014* GENETICS *4 credit hours* A general course in the cellular and molecular mechanisms of heredity. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 1474/1474L or AGRC 1124/1124L and AGRC 1214/1214L. Corequisite: BIOL 3014L. Will not satisfy general education science requirements. (Fall, Spring)

BIOL 3014L* GENETICS LAB *0 credit hours* LAB: A general course in the cellular and molecular mechanisms of heredity. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 1474/1474L or AGRC 1124/1124L and AGRC 1214/1214L. Corequisite: BIOL 3014. Will not satisfy general education science requirements. (Fall, Spring)

BIOL 3043* EVOLUTION *3 credit hours* Historical development of evolutionary concepts, and current theories to account for speciation, evolutionary mechanisms, and phylogenetic relationships. Lecture 3 hours. Prerequisite: BIOL 3014/3014L. Will not satisfy general education science requirements. (Fall)

BIOL 3054* PLANT TAXONOMY *4 credit hours* Classification of flowering plants with emphasis on the flora of the area. Lecture 3 hours, laboratory 3 hours, and field trips. Prerequisite: BIOL 2144/2144L. Corequisite: BIOL 3054L. Will not satisfy general education science requirements.

BIOL 3054L* PLANT TAXONOMY LAB *0 credit hours* LAB: Classification of flowering plants with emphasis on the flora of the area. Lecture 3 hours, laboratory 3 hours, and field trips. Prerequisite: BIOL 2144/2144L. Corequisite: BIOL 3054. Will not satisfy general education science requirements.

BIOL 3064* ECOLOGY *4 credit hours* 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 2144/2144L or BIOL 2154/2154L. Corequisite: BIOL 3064L. Will not satisfy general education science requirements.

BIOL 3064L* ECOLOGY LAB *0 credit hours* LAB: 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 2144/2144L or BIOL 2154/2154L. Corequisite: BIOL 3064. Will not satisfy general education science requirements.

BIOL 3074* NATURAL HISTORY OF THE VERTEBRATES *4 credit hours* Ecology, taxonomy and life histories of vertebrates. Field trips arranged. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154/2154L. Corequisite: BIOL 3074L. Will not satisfy general education science requirements.

BIOL 3074L* NATURAL HISTORY OF THE VERTEBRATES LAB *0 credit hours* LAB: Ecology, taxonomy and life histories of vertebrates. Field trips arranged. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154/2154L. Corequisite: BIOL 3074. Will not satisfy general education science requirements.

BIOL 3084* ORNITHOLOGY *4 credit hours* 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 2154/2154L. Corequisite: BIOL 3084L. Will not satisfy general education science requirements.

BIOL 3084L* ORNITHOLOGY LAB *0 credit hours* LAB: 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 2154/2154L. Corequisite: BIOL 3084. Will not satisfy general education science requirements.

BIOL 3093* IMMUNOLOGY *3 credit hours* Nature and mechanisms of natural and acquired resistance including humeral and cellular immunity. Characteristics of antigens and antibodies and of their interaction; transplantation reactions and hypersensitivities. Lecture 3 hours. Prerequisite: BIOL 3014/3014L. Will not satisfy general education science requirements.

BIOL 3104* COMPARATIVE VERTEBRATE ANATOMY *4 credit hours* Functional morphology and evolution of organ systems in representative chordates. This course emphasizes biomechanics and environmental adaptation, and fulfills the needs of pre-professionals and biology majors. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154/2154L. Corequisite: BIOL 3104L. Will not satisfy general education science requirements.

BIOL 3104L* COMPARATIVE VERTEBRATE ANATOMY LAB *0 credit hours* LAB: Functional morphology and evolution of organ systems in representative chordates. This course emphasizes biomechanics and environmental adaptation, and fulfills the needs of pre-professionals and biology majors. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154/2154L. Corequisite: BIOL 3104. Will not satisfy general education science requirements.

BIOL 3114* MAMMALOGY *4 credit hours* Classification, life histories, and distribution of mammals. Methods of collection and preservation. Lecture 3 hours, laboratory 3 hours, field trips arranged. Prerequisite: BIOL 2154/2154L. Corequisite: BIOL 3114L. Will not satisfy general education science requirements.

BIOL 3114L* MAMMALOGY LAB *0 credit hours* LAB: Classification, life histories, and distribution of mammals. Methods of collection and preservation. Lecture 3 hours, laboratory 3 hours, field trips arranged. Prerequisite: BIOL 2154/2154L. Corequisite: BIOL 3114. Will not satisfy general education science requirements.

BIOL 3124* HISTOLOGY *4 credit hours* 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 2034/2034L or BIOL 2154/2154L or BIOL 4004/4004L. Corequisite: BIOL 3124L. Will not satisfy general education science requirements.

BIOL 3124L* HISTOLOGY LAB *0 credit hours* LAB: 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 2034/2034L or BIOL 2154/2154L. Corequisite: BIOL 3124. Will not satisfy general education science requirements.

BIOL 3174* MOLECULAR BIOLOGY *4 credit hours* Structural and functional organization of prokaryotic and eukaryotic cells at the molecular level. Regulation of transcription and translation, DNA repair mechanisms, and cancer genetics are also considered. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 3014/3014L. Corequisite: BIOL 3174L. Will not satisfy general education science requirements.

BIOL 3174L* MOLECULAR BIOLOGY LAB *0 credit hours* LAB: Structural and functional organization of prokaryotic and eukaryotic cells at the molecular level. Regulation of transcription and translation, DNA repair mechanisms, and cancer genetics are also considered. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 3014/3014L. Corequisite: BIOL 3174. Will not satisfy general education science requirements.

BIOL 3184* PRINCIPLES OF ANATOMY *4 credit hours* This course provides students with an intensive survey of the microscopic and gross anatomy of various human tissues, organs, and organ systems. The course uses a systemic approach, with an emphasis on integrated structure-function relationships at the cell, tissue, and organ level. Includes extensive cadaver dissection. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154/2154L or CHEM 3324/3324L or SES 3013. Corequisite: BIOL 3184L. Will not satisfy general education requirements.

BIOL 3184L* PRINCIPLES OF ANATOMY LAB *0 credit hours* LAB: This course provides students with an intensive survey of the microscopic and gross anatomy of various human tissues, organs, and organ systems. The course uses a systemic approach, with an emphasis on integrated structure-function relationships at the cell, tissue, and organ level. Includes extensive cadaver dissection. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2154/2154L or CHEM 3324/3324L or SES 3013. Corequisite: BIOL 3184. Will not satisfy general education requirements.

BIOL 3194* FUNDAMENTALS OF MICROBIOLOGY *4 credit hours* Course content includes cell structure, physiology, and phylogeny of bacteria, archae, and eukaryotic microorganisms; growth, metabolism, genetics, ecological roles, genetic exchange, and introductory immunology. Laboratory includes methods for cultivation, characterization, and identification of microorganisms. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 1364/1364L, BIOL 1474/1474L, CHEM 1364/1361, and CHEM 1474/1471. Corequisite: BIOL 3194L. Will not satisfy general education requirements.

BIOL 3194L* FUNDAMENTALS OF MICROBIOLOGY LAB *0 credit hours* LAB: Course content includes cell structure, physiology, and phylogeny of bacteria, archae, and eukaryotic microorganisms; growth, metabolism, genetics, ecological roles, genetic exchange, and introductory immunology. Laboratory includes methods for cultivation, characterization, and identification of microorganisms. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 1364/1364L, BIOL 1474/1474L, CHEM 1364/1361, and CHEM 1474/1471. Corequisite: BIOL 3194L. Will not satisfy general education requirements.

BIOL 3901 BIOLOGY CAPSTONE I *1 credit hour* The first course in a two-semester biology capstone sequence. Includes required program assessment. Lecture 1 hour. Prerequisites: BIOL 1364/1364L and BIOL 1474/1474L, and BIOL 3014/3014L. Will not satisfy general education science requirements. (Fall)

BIOL 4004* PHYSIOLOGY *4 credit hours* Homeostatic mechanisms of human organ systems are emphasized, including some aspects of comparative physiology. Lecture 3 hours, laboratory 3 hours. Prerequisites:-BIOL 1474/1474L and CHEM 3314/3314L. BIOL 2154 is recommended. Corequisite: BIOL 4004L. Will not satisfy general education science requirements.

BIOL 4004L* PHYSIOLOGY LAB *0 credit hours* LAB: Homeostatic mechanisms of human organ systems are emphasized, including some aspects of comparative physiology. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 1474/1474L and CHEM 3314/3314L. BIOL 2154 is recommended. Corequisite: BIOL 4004. Will not satisfy general education science requirements.

BIOL 4054* VASCULAR PLANT MORPHOLOGY *4 credit hours* Morphology, evolution and ecology of vascular plants. Field trips arranged. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2144/2144L. Corequisite: BIOL 4054L. Will not satisfy General Education science requirements.

BIOL 4054L* VASCULAR PLANT MORPHOLOGY LAB *0 credit hours* LAB: Morphology, evolution and ecology of vascular plants. Field trips arranged. Lecture 3 hours, laboratory 3 hours. Prerequisite: BIOL 2144/2144L. Corequisite: BIOL 4054. Will not satisfy general education science requirements.

BIOL 4064* ADVANCED ECOLOGY *4 credit hours* 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 3064/3064L. Corequisite: BIOL 4064L. Will not satisfy general education science requirements.

BIOL 4064L* ADVANCED ECOLOGY LAB *0 credit hours* LAB: 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 3064/3064L. Corequisite: BIOL 4064. Will not satisfy general education science requirements.

BIOL 4114* ADVANCED MICROBIOLOGY *4 credit hours* This course will present a modern view of advanced topics in microbiology, such as advanced bacteriology, virology, and microbial genetics. This course is intended for biology majors. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 2124/2124L and CHEM 3314. Corequisite: BIOL 4114L. Will not satisfy general education science requirements.

BIOL 4114L* ADVANCED MICROBIOLOGY LAB *0 credit hours* LAB: This course will present a modern view of advanced topics in microbiology, such as advanced bacteriology, virology, and microbial genetics. This course is intended for biology majors. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 2124/2124L and CHEM 3314. Corequisite: BIOL 4114. Will not satisfy general education science requirements.

BIOL 4121-4 SPECIAL STUDIES *1-4 credit hours* Term paper and/or oral examination required. Independent study/directed readings 1-4 hours. Prerequisite: department permission. Will not satisfy general education science requirements.

BIOL 4153* BIOMETRY *3 credit hours* 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. Prerequisites: Junior Biology Major or Department Permission. Will not satisfy general education science requirements.

BIOL 4163* PHYSIOLOGY AND MOLECULAR BIOLOGY OF PLANTS *3 credit hours* The chemical and cellular organization of higher plants including selected aspects of their metabolism, growth, responses to stress, and molecular biology. Lecture 3 hours. Prerequisite: BIOL 2144/2144L. Will not satisfy general education science requirements.

BIOL 4174* CELL BIOLOGY *4 credit hours* Structural and functional organization of eukaryotic with an emphasis on human cells. Biological membranes, organelles, intracellular trafficking, cellular interactions, the cytoskeleton, and signal transduction are considered. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 3014/3014L. Corequisites: BIOL 4174L. Will not satisfy general education science requirements.

BIOL 4174L* CELL BIOLOGY LAB *0 credit hours* LAB: Structural and functional organization of eukaryotic with an emphasis on human cells. Biological membranes, organelles, intracellular trafficking, cellular interactions, the cytoskeleton, and signal transduction are considered. Lecture 3 hours, laboratory 3 hours. Prerequisites: BIOL 3014/3014L. Corequisites: BIOL 4174. Will not satisfy general education science requirements.

BIOL 4421-3 BIOLOGY INTERNSHIP *1-3 credit hours* Supervised work experience in a professional setting directly related to the field of biology, The internship will allow students to encounter practical workplace situations within their major field and gain practical experience in a business setting. Students may apply up to a maximum of three credit hours in internship credit to a major in Biology. A minimum of 32 hours of training or work is required per credit hour to a maximum of 3 credit hours. Prerequisite: Open to Biology majors who have completed at least 24 hours in Biology and have Junior or Senior standing. Will not satisfy general education science requirements.

BIOL 4901* BIOLOGY CAPSTONE II *1 credit hour* The second course in a two-semester biology capstone sequence. Includes required program assessment. Capstone/lecture 1 hour. Prerequisites: BIOL 3901 and senior standing in Biology. Will not satisfy general education science requirements. (Spring)

BUSINESS (BUS)

Business

BUS 1113* INTRODUCTION TO BUSINESS *3 credit hours* A general survey of the more significant principles, problems, and practices involved in the administration of business enterprises. Students learn about the functional areas of business enterprises (Accounting, Economics, Finance, Management, and Marketing). Intended for Freshman or Sophomore students. Lecture 3 hours. (Fall, Spring)

BUS 2113* BUSINESS COMMUNICATIONS *3 credit hours* Principles of effective business communication; organizational communication theory; document design; practice in preparing letters, memoranda, business reports, and employment-related messages; professional oral presentations. Lecture 3 hours. Prerequisite: ENGL 1213 or equivalent. (Fall, Spring)

BUS 2211-3 SPECIAL STUDIES *1-3 credit hours* 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. Lecture 1-3 hours. Prerequisite: As listed for each separate offering and/or permission of the Chair.

BUS 2903* MANAGEMENT SKILLS *3 credit hours* This course covers fundamental management processes in organizations as well as career planning and professionalism. Capstone/lecture 3 hours. Prerequisites: BUS 1113 and ECON 2013. (Fall, Spring)

BUS 3213 BUSINESS LAW I *3 credit hours* 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. (Fall, Spring)

BUS 3223 BUSINESS LAW II *3 credit hours* 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.

BUS 3881-4 WORKSHOP *3 credit hours* A course designed to emphasize specific Business and/or Economic topics. Combines the use of lectures and practical application exercises. This course may not be counted toward BBA and BACC program requirements. May be repeated for a maximum of 6 credit hours. Lecture 1-4 hours.

BUS 4471-3 SEMINAR IN BUSINESS *1-3 credit hours* Group projects designed to meet special needs of students in any of the disciplines of the Business Department. Seminar 1-3 hours. Prerequisite: Permission of the Chair.

BUS 4481-3 BUSINESS INTERNSHIP *1-3 credit hours* Supervised work experience in a professional setting directly relating to the student's business discipline. The internship will allow students to encounter practical workplace situations within their major field and gain experience in corporate and other business settings. Student may earn up to 6 internship credit hours; however, a maximum of 3 credit hours can be earned at one business. Fifty hours of on-the-job training/work is required per credit hour for a maximum of 3 credit hours per semester. Internship 1-3 hours. Prerequisite: 30 credit hours in business courses and Junior standing.

BUS 4491-3 INDEPENDENT STUDY IN BUSINESS *1-3 credit hours* Independent readings and/or study of specific problems or special subjects, based on pre-approved outlines of plans, with conferences and/or written reports. Independent study/directed readings 1-3 hours. Prerequisites: 9 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.

BUS 4632 BUSINESS CAPSTONE: PROFESSIONALISM & CAREERS *2 credit hours* This course is the career and professionalism portion of the capstone for the Bachelors' degrees in Business. The students apply knowledge from their degree programs to career planning and professional skills development. Capstone/lecture 2 hours. Prerequisites: FIN 3603, MGMT 3013, MKTG 3413, graduating senior status, or permission of Chair. (Fall, Spring)

BUS 4633 BUSINESS POLICY *3 credit hours* 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. Lecture 3 hours. Prerequisites: FIN 3603, MGMT 3013, MKTG 3413, and senior status, or permission of Chair. (Fall, Spring)

CATALAN (CTLN)

Communication, English, and Foreign Languages

CTLN 4153* INTENSIVE STUDIES IN CATALAN *3 credit hours* An intensive study of Catalan, with the goal of reaching near-native fluency in reading and writing the language. Some conversational practice. Two hours independent study, one hour lab. Prerequisite: Study of another Romance language or department permission.

CHEMISTRY (CHEM)

Chemistry, Physics, and Engineering

CHEM 1004* DESCRIPTIVE CHEMISTRY *4 credit hours* 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. General Education, Physical Science.

CHEM 1105* INTRODUCTION TO CHEMISTRY *5 credit hours* Introduction to Chemistry, a one-semester course for students with degree plan that has a one-semester chemistry requirement. This course includes fundamental knowledge of inorganic chemistry, with laboratory. Lecture 4 hours, lab 2 hours. Recommended prerequisite: College Algebra. Corequisite: CHEM 1105L. General Education Laboratory Science, Physical Science.

CHEM 1105L* INTRODUCTION TO CHEMISTRY LAB *0 credit hours* LAB: Introduction to Chemistry, a one-semester course for students with degree plan that has a one-semester chemistry requirement. This course includes fundamental knowledge of inorganic chemistry, with laboratory. Lecture 4 hours, lab 2 hours. Recommended prerequisite: College Algebra. Corequisite: CHEM 1105L. General Education Laboratory Science, Physical Science.

CHEM 1361* GENERAL CHEMISTRY LABORATORY I *1 credit hour* Selected laboratory experiences to test application of chemical theory. Laboratory 2 hours. Prerequisite: Successful completion of or concurrent enrollment in CHEM 1364. General Education Laboratory Science, Physical Science. (Fall, Spring)

CHEM 1364* GENERAL CHEMISTRY I *4 credit hours* Principles of general chemistry, with emphasis on theory and its application to structure and reactions. Lecture 4 hours. Prerequisite or Corequisite: MATH 1513 or equivalent or higher. It is also strongly advised that students who have not successfully passed high school

chemistry take CHEM 1004 Descriptive Chemistry prior to taking this course. General Education, Physical Science. (Fall, Spring)

CHEM 1471* GENERAL CHEMISTRY LABORATORY II *1 credit hour* Selected laboratory experiments to test applications of kinetics, thermodynamics, equilibrium, and quantitative analysis. Laboratory 2 hours. Prerequisite: Successful completion of or concurrent enrollment in CHEM 1474. Will not satisfy general education science requirements. (Fall, Spring)

CHEM 1474* GENERAL CHEMISTRY II *4 credit hours* A continuation of CHEM 1364. Lecture 4 hours. Prerequisite: CHEM 1364 and MATH 1513 or higher. CHEM 1471 must be successfully completed before credit is given in this course. Will not satisfy general education science requirements. (Fall, Spring)

Chemistry courses at the 2000-, 3000-, or 4000-level **may not** be used to fulfill general education science requirements.

CHEM 2441 WORKING SAFELY WITH CHEMICALS *1 credit hour* 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. Will not satisfy general education science requirements. Lecture 1 hour.

CHEM 2541* INTRODUCTION TO CHEMICAL LITERATURE *1 credit hour* This course is designed for students to distinguish between different types of literature sources, accomplish literature searches, prepare poster presentations, and write technical papers and resumes. Lecture 1 hour. Prerequisite: CHEM 1474. Will not satisfy general education science requirements. (Fall, Odd Years)

CHEM 3113* FUNDAMENTALS OF ANALYTICAL CHEMISTRY *3 credit hours* An introductory course in analytical chemistry emphasizing volumetric and electrochemical methods. Techniques for the analysis of samples based on instrumental methods are also introduced. Lecture 3 hours. Prerequisites: CHEM 1474 or equivalent. Will not satisfy general education science requirements. (Fall)

CHEM 3232* QUANTITATIVE ANALYSIS LABORATORY *2 credit hours* Laboratory techniques of quantitative analysis including volumetric and spectroscopic methods. Laboratory 6 hours. Prerequisite: CHEM 3113 or concurrent enrollment. CHEM 3113 must be successfully completed before credit is received in this course. Will not satisfy general education science requirements. (Fall)

CHEM 3314* ORGANIC CHEMISTRY I *4 credit hours* 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 1474 and CHEM 1471 or equivalent. Corequisite: CHEM 3314L. Will not satisfy general education science requirements. (Fall)

CHEM 3314L* ORGANIC CHEMISTRY I LAB *0 credit hours* LAB: 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 1474 and CHEM 1471 or equivalent. Corequisite: CHEM 3314. Will not satisfy general education science requirements. (Fall)

CHEM 3324* ORGANIC CHEMISTRY II *4 credit hours* A continuation of CHEM 3314. The second semester of a two-semester sequence. Lecture 3 hours, laboratory 3 hours. Prerequisite: CHEM 3314. Corequisite: CHEM 3324L. Will not satisfy general education science requirements. (Spring)

CHEM 3324L* ORGANIC CHEMISTRY II LAB *0 credit hours* LAB: A continuation of CHEM 3314. The second semester of a two-semester sequence. Lecture 3 hours, laboratory 3 hours. Prerequisite: CHEM 3314. Corequisite: CHEM 3324. Will not satisfy general education science requirements. (Spring)

CHEM 3334* CHEMISTRY OF WATER AND WASTEWATER *4 credit hours* 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. Prerequisites: CHEM 1471 and CHEM 1474. Corequisite: CHEM 3334L. Will not satisfy general education science requirements.

CHEM 3334L* CHEMISTRY OF WATER AND WASTEWATER LAB *0 credit hours* LAB: 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. Prerequisites: CHEM 1471 and CHEM 1474. Corequisite: CHEM 3334. Will not satisfy general education science requirements.

CHEM 3343* ORGANIC ANALYSIS *3 credit hours* 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. Corequisite: CHEM 3343L. Will not satisfy general education science requirements.

CHEM 3343L* ORGANIC ANALYSIS LAB *0 credit hours* 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. Will not satisfy general education science requirements.

CHEM 4025* INSTRUMENTAL METHODS OF ANALYSIS *5 credit hours* Theoretical and laboratory study of modern analytical techniques, both qualitative and quantitative, with emphasis on instrument types, their components and methodology. Lecture 3 hours, laboratory 6 hours. Prerequisites: CHEM 3113 and CHEM 3232. Corequisite: CHEM 4025L. Will not satisfy general education science requirements.

CHEM 4025L* INSTRUMENTAL METHODS OF ANALYSIS LAB *0 credit hours* LAB: Theoretical and laboratory study of modern analytical techniques, both qualitative and quantitative, with emphasis on instrument types, their components and methodology. Lecture 3 hours, laboratory 6 hours. Prerequisites: CHEM 3113 and CHEM 3232. Corequisite: CHEM 4025. Will not satisfy general education science requirements.

CHEM 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. Will not satisfy general education science requirements.

CHEM 4334* ADVANCED INORGANIC CHEMISTRY *4 credit hours* 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. Prerequisites: CHEM 3324, PHYS 1215, and MATH 2215. Will not satisfy general education science requirements.

CHEM 4351* PHYSICAL CHEMISTRY LABORATORY I *1 credit hour* Apparatus, method and calculations employed in physicochemical measurements. Laboratory 3 hours. Prerequisites: CHEM 4353 or concurrent enrollment and CHEM 3232. Will not satisfy general education science requirements.

CHEM 4353* PHYSICAL CHEMISTRY I *3 credit hours* The study of thermodynamics particularly as applied to chemical systems. Lecture 3 hours. Prerequisites: CHEM 1474/1471, MATH 2215 and PHYS 1215 or PHYS 2025. Will not satisfy general education science requirements.

CHEM 4361* PHYSICAL CHEMISTRY LABORATORY II *1 credit hour* A continuation of CHEM 4351. Laboratory 3 hours. Prerequisite: CHEM 4363 or concurrent enrollment. Will not satisfy general education science requirements.

CHEM 4363* PHYSICAL CHEMISTRY II *3 credit hours* A continuation of CHEM 4353. Study of kinetics, quantum mechanics, and statistical thermodynamics as related to chemical systems. Lecture 3 hours. Prerequisite: CHEM 4353. Will not satisfy general education science requirements.

CHEM 4401* BIOCHEMISTRY I LABORATORY *1 credit hour* Qualitative and quantitative examination of biochemical materials and reactions. Laboratory 3 hours. Prerequisite: CHEM 4403 or concurrent enrollment. Will not satisfy general education science requirements.

CHEM 4403* BIOCHEMISTRY I *3 credit hours* 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 concurrent enrollment. Will not satisfy general education science requirements.

CHEM 4411* BIOCHEMISTRY II LABORATORY *1 credit hour* A continuation of Biochemistry Laboratory CHEM 4401. Laboratory 3 hours. Prerequisites: CHEM 4401, CHEM 4413 or concurrent enrollment. Will not satisfy general education science requirements.

CHEM 4413* BIOCHEMISTRY II *3 credit hours* A continuation of Biochemistry, CHEM 4403, with emphasis on the catabolic routes of metabolism. Lecture 3 hours. Prerequisite: CHEM 4403. Will not satisfy general education science requirements.

CHEM 4481-3 ADVANCED TOPICS IN CHEMISTRY *1-3 credit hours* This lecture-based course will focus on a topic or topics of current interest to the chemical profession. Lecture 1-3 hours. Prerequisite: CHEM 3324 or CHEM 3345 or concurrent enrollment. Will not satisfy general education science requirements.

CHEM 4491-4 SPECIAL PROBLEMS IN CHEMISTRY *1-4 credit hours* Training in independent work. Experimental investigations of an assigned problem . Normally graded on S/U basis. Laboratory 3-12 hours. Prerequisite: Department approved application. Will not satisfy general education science requirements.

CHEM 4541* CHEMISTRY CAPSTONE *1 credit hour* The course involves student preparation and presentation of original and/or library chemical research topics. The course will also explore issues related to becoming a morally responsible scientist to ethical problem solving. Oral presentations and written reports are required. One scheduled presentation will be given outside of class time. Program assessment is also a component. Capstone/lecture 1 hour. Prerequisite: CHEM 2541 and Senior standing. Will not satisfy general education science requirements. (Spring)

CHILD DEVELOPMENT (CD)

Education

CD 1113 CHILD GROWTH AND DEVELOPMENT *3 credit hours* A study of the major theories and research of child development birth-6, to include: language acquisition, brain development, social/emotional development, sensory/motor skill development, cognitive development,

growth patterns, the influence of environmental factors, the influence of disabilities, and risk factors. Lecture 3 hours. (Fall, Spring)

CD 1123 INTRODUCTION TO FAMILY AND CHILD STUDIES *3 credit hours* An introduction to the field of family and child studies, focusing on career applications of family studies and child development. Lecture 3 hours. (Fall)

CD 1213 CURRICULUM AND ENVIRONMENTS *3 credit hours* A study of early childhood curriculum, experiences, and environments. Course does not meet requirements for teacher certification. Lecture 3 hours. (Fall)

CD 2223 FOUNDATIONS AND CURRENT ISSUES IN EARLY CHILDHOOD *3 credit hours* A study of social-emotional development and developmentally appropriate, evidence-based practices in child guidance. Lecture 3 hours.

CD 2881-3 SPECIAL TOPICS *1-3 credit hours* Directed individual or group study of selected topic(s) in Child Development. The course may be repeated for additional credit with departmental permission. Lecture 1-3 hours. Prerequisite: As listed for each separate offering and/or departmental permission. Lecture 1-3 hours. Prerequisite: as listed for each separate offering and/or department permission.

CD 3223 CHILD GUIDANCE *3 credit hours* A study of social-emotional development and developmentally appropriate, evidence-based practices in child guidance. Lecture 3 hours. (Fall)

CD 3233 EMERGENT LITERACY FOR YOUNG CHILDREN *3 credit hours* A study of language development; the study of principles, strategies, and practices of emergent literacy. The course focuses on emergent literacy best practices through the examination and application of current research in early literacy, including diversity and cultural considerations. Course does not meet requirements for teacher certification. Lecture 3 hours. (Spring)

CD 4223 ADMINISTRATION AND SUPERVISION IN EARLY CHILDHOOD *3 credit hours* Exploration of leadership and administration in early childhood settings, including business management, community collaborations, program evaluation, policy considerations, and strategic planning. Best practices in the recruitment, selection, training, supervision, and well-being of faculty/staff. Lecture 3 hours. (Fall)

CD 4333 DEVELOPMENTAL ASSESSMENT AND OBSERVATION *3 credit hours* A study of observational practices and methods of authentic assessment. Content includes focus on using assessment and observation to inform learning experiences, environments, and interventions. Lecture 3 hours. Prerequisite: CD 1113. (Spring)

CHINESE (CHNS)

Communication, English, and Foreign Languages

CHNS 1113* BEGINNING CHINESE (MANDARIN) I *3 credit hours* An introductory course in the language and culture of the People's Republic of China. Lecture 3 hours. General Education, Humanities–Diversity.

CHNS 1223* BEGINNING CHINESE (MANDARIN) II *3 credit hours* Continuation of Chinese (Mandarin) CHNS 1113. Lecture 3 hours. Prerequisite: CHNS 1113. General Education, Humanities–Diversity.

CHNS 2113* INTERMEDIATE CHINESE I *3 credit hours* An intermediate-level course in Chinese (Mandarin). Lecture 3 hours. Prerequisite: CHNS 1223 or equivalent.

CHNS 2223* INTERMEDIATE CHINESE II *3 credit hours* Continuation of CHNS 2113. Lecture 3 hours. Prerequisite: CHNS 2113 or equivalent.

CLASSICS (CLSC)

Communication, English, and Foreign Languages

CLSC 4153* WOMEN IN ANCIENT ROME *3 credit hours* Course provides an introduction to the lives of women and the roles that women played in everyday life both in ancient Rome and in the Roman provinces. Texts studied will provide insight into the attitudes of early Roman writers towards women and women's roles. Lecture 3 hours.

CLSC 4163* ROMAN MYTHOLOGY *3 credit hours* This course provides an introduction to the content of Roman mythology, to the role of myths in literature and art, and to modern ways of interpreting and using myths. Lecture 3 hours.

CLSC 4171-3* SPECIAL TOPICS IN CLASSICS *1-3 credit hours* Directed individual or group study of selected topics or problems in Classics. Areas of study will vary from semester to semester. The course may be repeated for a total of 6 hours with departmental permission. Independent study/directed readings 1-3 hours.

COMANCHE LANGUAGE (CMCH)

Communication, English, and Foreign Languages

CMCH 1113* COMANCHE LANGUAGE I *3 credit hours* An introductory course in the language and culture of the Comanche people. Lecture 3 hours. General Education, Humanities–Diversity.

CMCH 1223* COMANCHE LANGUAGE II *3 credit hours* Continuation of CMCH 1113. Lecture 3 hours. Prerequisite: CMCH 1113 or equivalent. General Education, Humanities–Diversity.

COMMUNICATION (COMM)

Communication, English, and Foreign Languages

COMM 1113* PRINCIPLES OF COMMUNICATION *3 credit hours* Principles of Communication is an introductory course designed to acquaint students with the basic theories of human communication and provide a comprehensive look at the communication field. The

course will deliver a summary overview of the interrelated components of communication, to include verbal communication, mass communication, organizational communication, intercultural communication and digital communication. Lecture, 3 hours. General Education, Communication.

COMM 1133* VOICE AND DICTION *3 credit hours* A general study of the structure of the vocal mechanism; principles of vocal quality, articulation and pronunciation. Lecture 3 hours.

COMM 2143* DEBATE *3 credit hours* 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.

COMM 2213* PROFESSIONAL SPEAKING *3 credit hours* 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. (Spring)

COMM 2313* SMALL GROUP COMMUNICATION *3 credit hours* 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. (Spring)

COMM 2393* 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. (Fall)

COMM 2593* COMMUNICATION RESEARCH *3 credit hours* Basic quantitative and qualitative research methods used in communication, journalism, broadcasting and public relations. Focus on researching public opinion and communication behaviors using experimental, survey, critical, and ethnographic designs. Includes hypothesis construction, empiricism, and data gathering techniques. Lecture 3 hours. (Fall)

COMM 2901* STRATEGIC COMMUNICATION CAPSTONE *1 credit hour* A reflection and expansion on the skills and knowledge gained from Strategic Communication courses of the AA in Strategic Communication program. Students will develop a portfolio of Strategic Communication skills, including a writing sample, a recorded presentation and a digital artifact. Capstone/Lecture 1 hour. Prerequisite: Departmental permission. (Fall, Spring)

COMM 3113* ARGUMENTATION AND ADVOCACY *3 credit hours* Acquaints students with forms and methods of argument construction. Emphasis is placed on the nature of argumentative controversies with application to such contexts as policy making, organizational decision-making, political rhetoric, and personal inquiry. The primary goal of the course is to help students become better producers and consumers of arguments as they appear in the public sphere. Lecture 3 hours.

COMM 3121-4 FORENSIC LAB *1-4 credit hours* 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. Laboratory 1-4 hours. Prerequisite: Departmental permission.

COMM 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.

COMM 3413* GENDER COMMUNICATION *3 credit hours* An examination of current theory and research on gender communication. Focuses attention on the relationship between communication and gender, including symbolic, social, and nonverbal dimensions. Topics include language attitudes, communication styles, gender identity construction, and relationship dynamics. Lecture 3 hours.

COMM 3633* PERSUASION *3 credit hours* 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.

COMM 3643* POLITICAL COMMUNICATION ANALYSIS *3 credit hours* 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.

COMM 3833* CONFLICT MANAGEMENT *3 credit hours* 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. Prerequisite: Students must be English Composition I eligible (i.e., have no English deficiencies).

COMM 3991-3 WORKSHOP *1-3 credit hours* 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. Workshop 1-3 hours.

COMM 4313* INTERCULTURAL COMMUNICATION *3 credit hours* Development of a multicultural perspective to communication processes. Designed to broaden students' awareness of human diversity and foster better understanding among individuals and groups from different cultural experiences. Topics include worldviews, cross-cultural conflict, majority/minority relationships, identity development, and prejudices. Lecture 3 hours. Prerequisite: Junior standing.

COMM 4513* LANGUAGE AND SOCIAL INTERACTION *3 credit hours* The study of symbolic processes, meaning construction, and relationships between thought and language. Topics include symbolic interactionism, dramatism, narrative, and social constructionism. Lecture 3 hours.

COMM 4623* COMMUNICATION THEORY *3 credit hours* An 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: 12 hours of communication coursework and Junior standing.

COMM 4673* 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. (Spring)

COMM 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. Internship 3 hours. Prerequisites: Upper division standing and department permission.

COMM 4901* COMMUNICATION CAPSTONE *1 credit hour* This course provides an overview of the major concepts in communication with an emphasis on the integration of four primary communication tracks: Journalism, Public Relations and Organizational Communication, Radio-Television, and Speech Communication. The course will also cover career options and graduate education in communication and related fields. Communication program assessment is a component of the course. Communication majors are required to take this course during their senior year. Capstone/lecture 1 hour. Prerequisites: Student must be a communication major, have taken COMM 1113, COMM 2393, COMM 4673 or PBRL 2113, RTV 1013, and JRMP 3523. Student must have completed at least 18 credit hours of communication coursework. (Fall, Spring)

COMM 4991-3* SPECIAL TOPICS *1-3 credit hours* Directed individual or group study of selected topic(s) in communication. The course may be repeated. Independent study/directed readings 1-3 hours.

COMPUTER AIDED DRAFTING (CAD)

Computing and Mathematical Sciences

CAD 1013* COMPUTER AIDED DRAFTING *3 credit hours* 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. Corequisite: CAD 1013L.

CAD 1013L* COMPUTER AIDED DRAFTING LAB *0 credit hours* LAB: 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. Corequisite: CAD 1013.

COMPUTER INFORMATION SYSTEMS (CIS)

Computing and Mathematical Sciences

CIS 2001-3 SPECIAL PROBLEMS IN COMPUTER INFORMATION SYSTEMS *1-3 credit hours* 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.

CIS 2013* VISUAL BASIC PROGRAMMING *3 credit hours* Elements of VISUAL BASIC programming language. Lecture 3 hours. Prerequisite: IT 1213.

CIS 2023 BUSINESS APPLICATIONS OF C++ *3 credit hours* Elements of the C++ programming language with emphasis on business applications. Lecture 3 hours. Prerequisite: MATH 1513 or concurrent enrollment or permission of department.

CIS 2043 GRAPHIC DESIGN BASICS *3 credit hours* 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. Lecture 3 hours.

CIS 3011-3 SOFTWARE APPLICATIONS *1-3 credit hours* 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. Lecture 1-3 hours. Prerequisites: department permission.

CIS 3023 ADVANCED BUSINESS APPLICATIONS OF C++ *3 credit hours* Emphasizes classes, objects, object-oriented programming, arrays, string processing and file manipulation. Lecture 3 hours. Prerequisite: CIS 2023.

CIS 3083 DATABASE DESIGN AND MANAGEMENT *3 credit hours* Emphasis on design and use of database systems to include UML and CASE tools. Lecture 3 hours. Prerequisite: IT 2414/2414L.

CIS 4013 DATA WAREHOUSING *3 credit hours* The strategies and processes for Data Warehousing of large relational databases. Topics include: understanding the role of data warehousing to businesses, understanding 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. Lecture 3 hours. Prerequisite: CIS 3083 or MIS 3033 or CS 3183.

COMPUTER SCIENCE (CS)

Computing and Mathematical Sciences

CS 1113 INTRODUCTION TO COMPUTER ORGANIZATION *3 credit hours* An introductory course in hardware. Topics will include basic organization of a computer system, number representations, binary arithmetic, digital logic circuits, I/O, storage, processor, program execution, and miscellaneous hardware related issues. Lecture 3 hours.

CS 1301* OPERATING SYSTEM UTILITIES I *1 credit hour* The basic commands of the operating system currently in use. Lecture 1 hour.

CS 1314* COMPUTER SCIENCE I *4 credit hours* An introduction to programming using an object-oriented language and its use in solving simple problems. Topics include: pseudo-code, control structures, functions, arrays, simple searching and sorting techniques, basic classes. Lecture 3 hours, laboratory 2 hours. Prerequisites: MATH 1513 or concurrent enrollment. Corequisite: CS 1314L. (Fall, Spring)

CS 1314L* COMPUTER SCIENCE I LAB *0 credit hours* An introduction to programming using an object-oriented language and its use in solving simple problems. Topics include: pseudo-code, control structures, functions, arrays, simple searching and sorting techniques, basic classes. Lecture 3 hours, laboratory 2 hours. Prerequisites: MATH 1513 or concurrent enrollment. Corequisite: CS 1314. (Fall, Spring)

CS 1514* COMPUTER SCIENCE II *4 credit hours* A continuation of programming using an object-oriented language. Topics include: searching, sorting, pointers, files, classes and object-oriented issues, recursion, and introduction to linked data structures. Lecture 3 hours, laboratory 2 hours. Prerequisites: CS 1313 or CS 1314/1314L with a grade of "C" or higher. Corequisite: CS 1514L. (Fall)

CS 1514L* COMPUTER SCIENCE II LAB *0 credit hours* LAB: A continuation of programming using an object-oriented language. Topics include: searching, sorting, pointers, files, classes and object-oriented issues, recursion, and introduction to linked data structures. Lecture 3 hours, laboratory 2 hours. Prerequisites: CS 1313 or CS 1314/1314L with a grade of "C" or higher. Corequisite: CS 1514. (Fall)

CS 1523* DISCRETE MATH *3 credit hours* 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: IT 1413 or IT 1414/1414L or CS 1313 or CS 1314/1314L. (Fall)

CS 2001-3 SEMINAR IN COMPUTER SCIENCE *1-3 credit hours* Elementary current topics that are not part of the common core. Lecture 1-3 hours. Prerequisites: Announced prerequisites.

CS 2333 WEB SYSTEMS TECHNOLOGIES *3 credit hours* An introduction to web programming. Topics will include: html, CSS, Java Script, server-side scripting, cascading styles, and CGI. Emerging technologies will be covered. Lecture 3 hours. Prerequisite: IT 1413 or IT 1414/1414L or CS 1313 or CS 1314/1314L.

CS 2413* DATA STRUCTURES *3 credit hours* An introduction to elementary data structures (stacks, queues, linked lists and trees) and their applications. A brief survey of sorting techniques. Lecture 3 hours. Prerequisites: CS 1513 or CS 1514/1514L with a grade of "C" or higher. (Spring)

CS 2513 COMPUTER ORGANIZATION AND ARCHITECTURE *3 credit hours* 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 1313 or CS 1314/1314L. (Spring)

CS 3001-3 SEMINAR IN COMPUTER SCIENCE *1-3 credit hours* Intermediate level current topics that are not part of a common core. Lecture 1-3 hours. Prerequisites: Announced prerequisites.

CS 3013 NETWORK PROGRAMMING *3 credit hours* 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 2413 and IT 1063. (Fall)

CS 3100-6 COMPUTER SCIENCE INTERNSHIP *0-6 credit hours* 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, they 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. Internship 0-6 hours. Prerequisite: Departmental permission and

completion of substantial course work in computer science.

CS 3183 DATABASE DESIGN AND MANAGEMENT *3 credit hours* This course introduces the basic theories, concepts, skills, and techniques of data and database systems. The course will primarily focus on database design and implementation. Lecture 3 hours. Prerequisite: CS 1314/1314L or IT 1414/1414L or IT 2033 or MIS 2113. (Cross-listed with MIS 3033.) (Spring)

CS 3343 NUMERICAL ANALYSIS I *3 credit hours* 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 CS 1314/1314L or department permission.

CS 3443 NUMERICAL ANALYSIS II *3 credit hours* 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.

CS 3513 OPERATING SYSTEMS *3 credit hours* Overview of hardware and software, process management, storage management, processor management, and auxiliary storage management. Lecture 3 hours. Prerequisite: CS 2413. (Fall)

CS 3573 COMPUTER GRAPHICS *3 credit hours* 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 and MATH 3013 or MATH 4433.

CS 3713 ALGORITHM ANALYSIS *3 credit hours* 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 1523 or concurrent enrollment and CS 2413 and MATH 2215. (Fall)

CS 3813 PARALLEL COMPUTING *3 credit hours* 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 2413.

CS 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.

CS 4013 FORMAL LANGUAGE THEORY *3 credit hours* 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.

CS 4204 SOFTWARE ENGINEERING *4 credit hours* This course emphasizes the software development life cycle. Topics will include: Uniform Modeling Language (UML), testing methods, and software correctness. Acquisition of the skills necessary to control complex programming projects. Lecture 3 hours, laboratory 2 hours. Prerequisite: CS 2413. Corequisite: CS 4204L. (Fall)

CS 4204L SOFTWARE ENGINEERING LAB *0 credit hours* This course emphasizes the software development life cycle. Topics will include: Uniform Modeling Language (UML), testing methods, and software correctness. Acquisition of the skills necessary to control complex programming projects. Lecture 3 hours, laboratory 2 hours. Prerequisite: CS 2413. Corequisite: CS 4204. (Fall)

CS 4223 PROGRAMMING LANGUAGES AND COMPILERS *3 credit hours* 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 2413.

CS 4233 CAPSTONE PROJECT *3 credit hours* This course provides students the opportunity to complete a comprehensive software project. The project will be done through team effort, and may involve the use of multiple programming languages. Emphasis will be on professional communication, team work, and comprehensive utilization of computing knowledge obtained in previous courses. This is a hands-on and lecture combined course. Capstone/lecture 3 hours. Prerequisite: Senior standing and CS 4204/4204L. (Spring)

CS 4443 COMPUTER USAGE FOR ELEMENTARY TEACHERS *3 credit hours* 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 department permission.

CS 4491-3 SPECIAL PROBLEMS IN COMPUTER SCIENCE *1-3 credit hours* 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 chair. Independent study 1-3 hours. Prerequisite: Approval by department chair and faculty member supervising the project.

CRIMINAL JUSTICE (CJ)

Social Sciences

CJ 1013* INTRODUCTION TO CRIMINAL JUSTICE *3 credit hours* 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. (Fall, Spring)

CJ 2001-3* SPECIAL PROBLEMS IN CRIMINAL JUSTICE *1-3 credit hours* 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. Lecture 1-3 hours. Prerequisites: CJ 1013.

CJ 2013* INTRODUCTION TO LAW ENFORCEMENT *3 credit hours* 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. (Fall, Spring)

CJ 2023* CRIMINAL JUSTICE REPORTING *3 credit hours* 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.

CJ 2043* LAW AND SOCIETY *3 credit hours* This course discusses the study of the relationships and interactions between law, social structure, and cultural practices. Also included are theoretical perspectives from a number of social science disciplines. Stress is placed upon the relationship of law to social value and morals. These areas of study are intertwined with other sociological concerns such as inequality, power, social organizations, social psychology, social change, race, gender, culture, and communication. Addresses issues regarding the balance between the interests of society and individual rights. Lecture 3 hours. Prerequisite: CJ 1013.

CJ 2053* COMMUNITY CORRECTIONS AND TREATMENT METHODS *3 credit hours* A study of the work of Community Corrections employees and their methods of monitoring and counseling correctional individuals and families. The course will explore programs and services offered through the community that specialize in multiple types of addictions and treatment methods. Lecture 3 hours. Prerequisite: CJ 1013.

CJ 2063* ASPECTS OF CRIMINAL INVESTIGATION *3 credit hours* This course discusses the duties of law enforcement personnel who are involved throughout the criminal investigation process of different categories of crime scenes. Specific topics include crime scene processing, interviewing techniques, and chain of custody issues. Coverage will also include successful care management techniques that encompass current and emerging forensic technologies, courtroom preparation, and report writing. Lecture 3 hours. Prerequisite: CJ 1013.

CJ 2073* INTRODUCTION TO CORRECTIONS *3 credit hours* 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. (Fall, Spring)

CJ 2083* SECURITY CONCEPTS *3 credit hours* 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. Prerequisite: CJ 1013.

CJ 2103* CASE MANAGEMENT AND CORRECTIONAL LAW *3 credit hours* The 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. Prerequisite: CJ 1013.

CJ 2113* CRIMINAL LAW *3 credit hours* A review of criminal law. The administration of justice as it exists in the municipality under state statutes. The rights and privileges of the accused and the jurisdiction of violators. Prerequisite: CJ 1013. Lecture 3 hours. (Fall, Spring)

CJ 2233* AMERICAN COURTS *3 credit hours* This course provides students with an understanding of the recognized functions of Courts in the American Criminal Justice System. It will address jurisdiction, policies, and procedures of courts in the administration of criminal justice, including trial and appellate courts. Courts will be examined at the local, state, and federal levels. Lecture 3 hours. Prerequisite: CJ 1013. (Fall, Spring)

CJ 3003* JUVENILE JUSTICE SYSTEM *3 credit hours* 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. (Fall, Spring)

CJ 3013* ORGANIZED AND WHITE COLLAR CRIME *3 credit hours* A study of organized and white collar crime strategies and techniques used to combat them. Lecture 3 hours. Prerequisites: CJ 1013.

CJ 3023* CRIMINAL JUSTICE AND FILM *3 credit hours* This course is an examination of how television and films depict crime and the criminal justice system. Films are scrutinized on the manner that victims, perpetrators, witnesses, and criminal justice agents (police, attorneys, correction officers, and judges) are depicted in television and motion pictures. Emphasis is placed on the way entertainment illustrates criminology and victimology. Lecture 3 hours. Prerequisites: CJ 1013.

CJ 3033* CYBERCRIME *3 credit hours* A detailed analysis regarding the evolution of crime due to the use of and advancements in technology. This course will provide students with an introduction of the social, legal, and technical impact of cybercrime. Students will explore how to identify, investigate, and collect evidence for different types of crimes involving computers and cyberspace. Lecture 3 hours. Prerequisites: CJ 1013 and CJ 2113.

CJ 3063* CRIMINAL EVIDENCE AND PROCEDURES *3 credit hours* A study of the procedures for conducting civil litigation and criminal trials, and an examination of

constitutional case law as decided by the Appellate Courts and 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 and CJ 2113.

CJ 3103* THEORIES OF CRIME *3 credit hours* Theoretical explanations of etiology of crime (i.e., theories from biological, psychological, sociological, geographic, economic, and political perspectives). The nature and extent of crime, historical development of criminological theory, and analysis of crime control and its implications. Lecture 3 hours. Prerequisite: CJ 1013. (Fall, Spring)

CJ 3133* ETHICS IN CRIMINAL JUSTICE *3 credit hours* This course discusses professional conducts of Criminal Justice practitioners. The institutional actors of the Criminal Justice system are granted a certain degree of discretion required for performing their jobs and this course will analyze the ethical boundaries of such discretion. Lecture 3 hours. Prerequisite: CJ 1013. (Fall)

CJ 3723 INTERNSHIP IN CRIMINAL JUSTICE *3 credit hours* 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. Internship 3 hours. Prerequisites: CJ major, junior standing, and instructor permission.

CJ 4023* HOMELAND SECURITY *3 credit hours* This course is an analysis of terrorism and how our criminal justice and homeland security systems deal with this problem in both the national and international arenas. The course includes the discussion of definition, structure, causes, methods, treatment/prevention of terrorism, and coping with hostage situations. Lecture 3 hours. Prerequisite: CJ 1013.

CJ 4033* RESEARCH METHODS AND STATISTICS *3 credit hours* This course is an introduction to Social Science research. Basic methodological and statistical (applied) issues in Criminology and Criminal Justice will be discussed. Designed to provide students with a foundation in Social Science research methods. Lecture 3 hours. Prerequisite: MATH 1413 or higher and CJ 1013. (Fall)

CJ 4133* CRIMINAL JUSTICE ADMINISTRATION *3 credit hours* 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. (Fall, Spring)

CJ 4143* SEXUAL OFFENSES AND OFFENDERS *3 credit hours* An examination of the problems associated with sexual offenses, offenders, and their treatment by the criminal justice system. The course will include examination of relevant legal definitions, the causes and identification of sexual offenses, sexual offense prevention/treatment for victims and perpetrators, the various types of sexual offenses as defined by the law, and how the criminal justice systems handles sexual offenders. Lecture 3 hours. Prerequisite: CJ 1013.

CJ 4153* DEATH PENALTY *3 credit hours* 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: CJ 1013.

CJ 4491-3* SELECTED TOPICS IN CRIMINAL JUSTICE *1-3 credit hours* 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: CJ 1013.

CJ 4591-3* INDEPENDENT STUDY IN CRIMINAL JUSTICE *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisites: CJ major, junior standing, and instructor's permission.

CJ 4911-3* CRIMINAL JUSTICE CAPSTONE *1-3 credit hours* CJ 4911-3 is a 1-3 hour course for graduating seniors in Criminal Justice. This course is designed to enhance students' knowledge in the fields of Criminology and Criminal Justice. It also serves as an introduction to careers in the Criminal Justice field, graduate schools, and other pertinent considerations for prospective CJ graduates. Capstone 1-3 hours. Prerequisite: CJ 1013. (Spring)

CYBER SECURITY & INFORMATION ASSURANCE (IAS)

Computing and Mathematical Sciences

IAS 2013* HISTORY OF INFORMATION ASSURANCE/ SECURITY *3 credit hours* 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. Prerequisites: IT 1013 and ENGL 1113.

IAS 2233* INTRODUCTION TO INFORMATION ASSURANCE/SECURITY *3 credit hours* 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 1063. (Fall, Spring)

IAS 2333 COMPUTER FORENSICS *3 credit hours* Procedures for the identification, preservation, and extraction of electronic evidence. Modes of hidden data, cryptography, steganography, compression. Investigating Windows and Linux computers. Lecture 3 hours. Prerequisite: IAS 2233.

IAS 3063 INFORMATION ASSURANCE NETWORKING FUNDAMENTALS *3 credit hours* 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.

IAS 3233* E-COMMERCE AND WEB SECURITY *3 credit hours* Electronic commerce technology, standards and issues. Introduction to security architectures for electronic commerce: digital signatures, certificates, and public key infrastructure. Vulnerabilities in e-commerce and web applications will be studied as well as the security countermeasures. Lecture 3 hours. Prerequisite: IAS 2233.

IAS 3263 SECURITY ARCHITECTURE AND DESIGN *3 credit hours* 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 2233.

IAS 4063* CURRENT TOPICS IN INFORMATION ASSURANCE AND NETWORK SECURITY *3 credit hours* This course will cover specialized or emerging topics in Cyber Security and Information Assurance (IAS) that are not covered elsewhere in the IAS program. This course will provide the opportunity to keep the program current by introducing new and in-demand topics in IAS. Lecture 3 hours. Prerequisite: IAS 3063.

DARI (DARI)

Communication, English, and Foreign Languages

DARI 4153* INTENSIVE STUDIES IN DARI I *3 credit hours* An intensive introductory study of Dari combining guided independent study of the written language with regular oral practice of the spoken language. Two hours independent study, one hour lab. Prerequisites: ENGL 1213 and six hours of study of another foreign language or permission of the department.

DARI 4163* INTENSIVE STUDIES IN DARI II *3 credit hours* Continuation of DARI 4153. Two hours independent study, one-hour lab. Prerequisite: DARI 4153.

DUTCH (DTCH)

Communication, English, and Foreign Languages

DTCH 4153* INTENSIVE STUDIES IN DUTCH *3 credit hours* An intensive introductory study of Dutch combining guided independent study of the written language with regular oral practice of the spoken language. Two hours independent study, one hour lab. Prerequisites: ENGL 1213 and six hours of study of another Germanic language or permission of the department.

EARLY CHILDHOOD EDUCATION (ECE)

Education

ECE 2163 HEALTH, SAFETY AND NUTRITION FOR YOUNG CHILDREN *3 credit hours* A course for students working in an early childhood educational setting, for child care givers, 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. Lecture 3 hours. (Spring, Summer)

ECE 3154 METHODS AND PRACTICUM IN EARLY CHILDHOOD EDUCATION *4 credit hours* Methods and practice in instruction and guidance of young children. Emphasis on developmental processes and motor skills. A field component is required. Lecture 4 hours. (Fall)

ECE 3303 HOME, SCHOOL AND COMMUNITY *3 credit hours* Examination of family theories and relationships with schools and communities. Exploration of diversity, equity, and social justice in the context of the child, family, educator, school, and community. Lecture 3 hours. (Fall, Summer)

ECE 3801-3 WORKSHOP IN EARLY CHILDHOOD EDUCATION *1-3 credit hours* 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. Workshop 1-3 hours. Prerequisite: Junior standing.

ECE 3841-3 SELECTED TOPICS IN EARLY CHILDHOOD EDUCATION *1-3 credit hours* Directed study on a special subject or problems in early childhood education. May be repeated with different topics for a total of 3 hours. Independent study/directed readings 1-3 hours. Prerequisite: Junior standing.

ECE 4144 METHODS AND PRACTICUM IN COGNITIVE DEVELOPMENT *4 credit hours* 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. Lecture 4 hours. Prerequisite or concurrent enrollment with: ECE 2163, ECE 3303, and ECE 3154. (Spring)

ECE 4653 ASSESSMENT OF YOUNG CHILDREN *3 credit hours* 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. Lecture 3 hours. Prerequisite: Admission to Teacher Education.

EARTH SCIENCE (ESCI)

Agriculture, Biology, and Health Sciences

ESCI 1135* EARTH SCIENCE *5 credit hours* A survey of earth and environmental sciences including topics selected from geology, meteorology, climatology, oceanography, and astronomy. Lecture 4 hours, laboratory 2 hours. General Education Laboratory Science, Physical Science. Corequisite: ESCI 1135L.

ESCI 1135L* EARTH SCIENCE LAB *0 credit hours* LAB: A survey of earth and environmental sciences including topics selected from geology, meteorology, climatology, oceanography, and astronomy. Lecture 4 hours, laboratory 2 hours. General Education Laboratory Science, Physical Science. Corequisite: ESCI 1135.

ECONOMICS (ECON)

Business

ECON 2003* ECONOMIC FOUNDATIONS OF FINANCE *3 credit hours* A first course in the economic underpinnings of personal finance, incorporating the basic analytical frameworks used by economists and financial planners. The central topics typically include supply and demand, unemployment, inflation, interest rates, time value of money, taxation and tax strategy, savings and investments, debt instruments, insurance, and financial institutions. Recommended for non-Business majors. Lecture 3 hours. General Education, Economics.

ECON 2013* PRINCIPLES OF MACROECONOMICS *3 credit hours* An introduction to, and analysis of, the basic principles of supply and demand, national income accounting, business cycle, inflation, unemployment, determinants of the level of output, employment, prices, money and banking, monetary and fiscal policies, economic growth, international trade, and finance. Lecture 3 hours. General Education, Economics. (Fall, Spring)

ECON 2023* PRINCIPLES OF MICROECONOMICS *3 credit hours* Basic principles of supply and demand, elasticity, production and costs, market structure, output and price determination, factor market, welfare effects of government regulations, and theory and policy related to international trade. Lecture 3 hours. Prerequisite: ECON 2013. (Fall, Spring)

ECON 3013* INTERMEDIATE MICROECONOMIC THEORY *3 credit hours* This course is an extension of introductory microeconomics. The course will explore the decision-making behavior of consumers and households and their interaction in the market place. The topics covered include consumer preference analysis and utility maximization; theory of a firm and production decision; different market structures and their implication for production, pricing, and distribution of goods. Other topics covered include input markets, government regulations, and strategic decision making. Lecture 3 hours. Prerequisite: ECON 2023 and MATH 1463 or higher.

ECON 3023* INTERMEDIATE MACROECONOMIC THEORY *3 credit hours* National income concepts; aggregate demand by household, business, government, and foreign sectors; national income and employment determination in classical and Keynesian models; price level and inflation; money, interest rates and monetary policy; fiscal policy and public debt; exchange rate and balance of payments. Lecture 3 hours. Prerequisite: ECON 2023.

ECON 3313* MONEY AND BANKING *3 credit hours* Evolution of money and banking; organization operation of chartered banks and other financial institutions; the role of the Federal Reserve System and financial institutions in the money supply process, demand for money; monetary policy, regulations of the financial system, foreign exchange market. Lecture 3 hours. Prerequisite: ECON 2023. (Cross-listed with FIN 3313.)

ECON 3823* QUANTITATIVE METHODS *3 credit hours* Decision-making processes and techniques. This course emphasizes the quantitative skills needed in all areas of business and economics. These skills include statistical, econometric, forecasting, and decision analysis. Computer utilization is used in analyzing and solving business and economic-related problems. Lecture 3 hours. Prerequisites: STAT 2613 and ECON 2023.

EDUCATION (EDUC)

Education

EDUC 1800 EDUCATION INTRODUCTORY SEMINAR *0 credit hours* 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. Seminar 0 hours.

EDUC 2881-3 SELECTED TOPICS IN EDUCATION *1-3 credit hours* Directed individual or group study of selected topics in education. The course may be repeated for additional credit with departmental permission. Independent study/directed readings 1-3 hours. Prerequisite: as listed for each separate offering and/or departmental permission.

EDUC 3003* INTRODUCTION TO TEACHING *3 credit hours*. 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. Lecture 3 hours. Prerequisite: ENGL 1113.

EDUC 3013* CULTURAL FOUNDATIONS OF EDUCATION *3 credit hours* 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.

EDUC 3023 CREATIVE EXPERIENCES FOR EARLY CHILDHOOD AND ELEMENTARY SCHOOL: AN INTEGRATED APPROACH *3 credit hours* 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. Lecture 3 hours. (Fall, Spring)

EDUC 3513 TEACHING PRIMARY READING *3 credit hours* Principles and practice of teaching reading grades K through 3 with emphasis on emerging literacy, phonics, and other beginning reading skills. Lecture 3 hours. Prerequisite or concurrent enrollment: LIBS 3423. (Fall, Spring)

EDUC 3533 TEACHING INTERMEDIATE/MIDDLE SCHOOL READING *3 credit hours* 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. Lecture 3 hours. Prerequisite or concurrent enrollment with: EDUC 3513. (Spring)

EDUC 3612 CLASSROOM MANAGEMENT *2 credit hours* The study of effective practices of classroom management, motivation, and disciplinary methodologies. Lecture 2 hours. Prerequisite: admission to professional semester. Corequisite: Must be taken concurrently with EDUC 4935 and EDUC 4945.

EDUC 3673 MEDIA AND TECHNOLOGY IN EDUCATION *3 credit hours* 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.

EDUC 3733* DEVELOPMENTAL PSYCHOLOGY *3 credit hours* 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. Lecture 3 hours. Prerequisite: PSY 1113.

EDUC 3753* EDUCATIONAL PSYCHOLOGY *3 credit hours* 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. Lecture 3 hours. Prerequisites: EDUC 3733 and admission to Teacher Education.

EDUC 3881-2 WORKSHOP *1-2 credit hours* 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. Workshop 1-2 hours. Prerequisites: Junior standing and department permission.

EDUC 4313 PRACTICUM: IMPACTS ON LEARNING *3 credit hours* A study of learners, schools, and the community and related effects on teaching and learning. Includes sixty (60) hours of observation and participation in the public schools under mentor teacher guidance. Practicum 3 hours. Prerequisite: Admission to Teacher Education.

EDUC 4423 LANGUAGE ARTS METHODS *3 credit hours* An elementary methods course emphasizing language arts integrated with other content areas. Focus on listening, speaking, reading, writing, viewing and visually representing with elementary school applications. Lecture 3 hours. Prerequisite: Admission to Teacher Education. (Spring, Odd Years, Summer)

EDUC 4443 SOCIAL STUDIES METHODS *3 credit hours* 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. Lecture 3 hours. Prerequisite: Admission to Teacher Education. (Fall)

EDUC 4463 MATHEMATICS METHODS *3 credit hours* 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. Lecture 3 hours. Prerequisite: Admission to Teacher Education. (Fall, Spring)

EDUC 4483 SCIENCE METHODS *3 credit hours* An elementary methods course emphasizing science integrated with other content areas. Focus on physical, life, and earth disciplines of science with elementary school applications. Lecture 3 hours. Prerequisite: Admission to Teacher Education. (Spring, Summer)

EDUC 4553 DIAGNOSIS AND REMEDIATION OF READING DIFFICULTIES *3 credit hours* 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. Lecture 3 hours. Prerequisites: EDUC 3513 and admission to Teacher Education. (Fall, Spring)

EDUC 4653 CLASSROOM ASSESSMENT *3 credit hours* 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. Lecture 3 hours. Prerequisite: Admission to Teacher Education or EDUC 3003 and Departmental Permission.

EDUC 4881-3 SELECTED TOPICS IN EDUCATION *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: EDUC 3003. May be repeated with department permission.

EDUC 4891-2 SPECIAL STUDIES *1-2 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisites: Junior standing and department permission.

EDUC 4893 METHODS AND MANAGEMENT IN TEACHING *3 credit hours* This course is designed to teach best practices and methods of effective teaching and classroom management. Lecture 3 hours.

EDUC 4935 CLINICAL EXPERIENCE IN TEACHING I *5 credit hours* Education preparation program majors engage in full-time clinical/student teaching experiences with particular emphasis on the learner and learning context, content knowledge, and instructional practice under the supervision and guidance of a mentor teacher and university supervisor. A professional education seminar is included. Clinical Practice 5 hours. Prerequisite: Admission to professional semester.

EDUC 4945 CLINICAL EXPERIENCE IN TEACHING II *5 credit hours* Education preparation program majors engage in full-time clinical/student teaching experiences with particular emphasis on instructional practice, professional responsibility, and connecting theory to practice under the supervision and guidance of a mentor teacher and university supervisor. A professional education seminar is included. Clinical Practice 5 hours. Prerequisite: Admission to professional semester.

ENGINEERING (ENGR)

Chemistry, Physics, and Engineering

ENGR 1411 INTRODUCTION TO ENGINEERING *1 credit hour* Introduction to engineering disciplines and available career paths. Topics covered: majors, study habits, career planning, advising, professional societies, and student programs. Student must be eligible to take MATH 2215 or higher. Lecture 1 hour. (Fall)

ENGR 1412 ENGINEERING DESIGN AND CAD *2 credit hours* Introduction to engineering design using modern design methodologies and computer-aided tools. By using computer aided design/drafting software, SolidWorks/AutoCAD, students will learn basic principles of engineering graphics and geometric modeling to assist in design problem visualization and planning. Design, construction and testing through participation in a team-based design project contest. Lecture 2 hours. Student must be eligible to take MATH 2215 or higher. (Fall)

ENGR 2002 PROFESSIONAL DEVELOPMENT *2 credit hours* Introduction to real world applications of engineering skills learned in the Engineering curriculum, including speakers from industry and studying projects driven from industry needs. Lecture 2 hours. Prerequisites: ENGR 2113.

ENGR 2113 STATICS *3 credit hours* A study of vector representation of forces and movement. Resultants of force systems, static equilibrium of rigid bodies, statics of structures, and fluid statics. Free body, shear and moment diagrams. Lecture 3 hours. Prerequisites: MATH 2215 and PHYS 2015 or concurrent enrollment. (Spring)

ENGR 2153 MECHANICS AND DESIGN OF MATERIALS AND MANUFACTURING *3 credit hours* Introduction to basic principles of mechanics and materials including topics in stress and strain, transformations, kinematic relations and review of conservation equations, Hooke's Law, Young's modulus, and Poisson's ratio will be utilized. Solutions of one- and two-dimensional mechanics problems, including thermal stresses and strains, torsion, and beam flexure, shear and deflection, and buckling of columns. Structures and properties of engineering materials, manufacturing process and equipment and design concepts will be introduced. Project work required to assist in application of material, design, and manufacturing processes. Lecture 3 hours. Prerequisites: MATH 2244 and ENGR 2113.

ENGR 2213 THERMODYNAMICS *3 credit hours* First and Second Laws of Thermodynamics are developed and applied to the solution of problems from a variety of engineering fields. The study of properties of substances and principles governing changes in form of energy. Extensive use is made of partial differential calculus to interrelate the thermodynamic functions. Lecture 3 hours. Prerequisites: ENGR 2113 and CHEM 1364/1361.

ENGR 2223 FLUID MECHANICS *3 credit hours* The study of fluid properties, statics, conservation equations, dimensional analysis and similitude, viscous flow in ducts, inviscid flow, boundary layer theory, open channel flow, turbomachinery and fluid measurement techniques: e.g., Navier-Stokes Equations, Eulers Equations, Bernoulli Equations, etc., and their applications. It will also include examples of ideal fluid flow and viscous fluid flow, such as flow in open and closed conduits. Lecture 3 hours. Prerequisites: ENGR 2113. (Fall)

ENGR 2314 INTRODUCTION TO DIGITAL DESIGN *4 credit hours* This course involves the study of number systems and their applications, Boolean algebra, minimization procedures, combinatorial logic functions, introduction to sequential logic design, finite state machines and clocked (synchronous) sequential circuits. Analysis, synthesis and implementation are appropriately emphasized. Lecture 3 hours, laboratory 3 hours. Prerequisite: MATH 2235. Corequisite: ENGR 2314L.

ENGR 2314L INTRODUCTION TO DIGITAL DESIGN LAB *0 credit hours* LAB: This course involves the study of number systems and their applications, Boolean algebra, minimization procedures, combinatorial logic functions, introduction to sequential logic design, finite state machines and clocked (synchronous) sequential circuits. Analysis, synthesis and implementation are appropriately emphasized. Lecture 3 hours, laboratory 3 hours. Prerequisite: MATH 2235. Corequisite: ENGR 2314.

ENGR 2533 DYNAMICS *3 credit hours* This course is an introduction to basic principles of engineering. Topics include kinematics and kinetics of particles, systems of particles, and rigid bodies from a Newtonian viewpoint using vector algebra and calculus. Work-energy and impulse-momentum principles and planar and three-dimensional kinetics and kinematics of rigid bodies will be studied. Lecture 3 hours. Prerequisites: ENGR 2113.

ENGR 2713 DIGITAL SIGNALS AND FILTERING *3 credit hours* This course involves the study of digital signals and filters, discrete Fourier and Z transforms and sampling. Lecture 3 hours. Prerequisites: ENGR 1411 and MATH 2235.

ENGR 2723 ELECTRICAL CIRCUITS *3 credit hours* The study of the elements of electrical engineering: AC and DC circuits, mech and node formulation of network equations, steady-state response to sinusoids, energy, power and power factor. Lecture 3 hours. Prerequisites: ENGR 2113 and MATH 2235. (Spring)

ENGR 3112 SOLID MECHANICS LAB *2 credit hours* Measurement of displacement, velocity, acceleration, force, torque, strain, stress, data acquisition and processing, and data analysis. The general objective of this course is to provide an exposure to the measurement methods commonly used to monitor structural systems and components. Laboratory activities provide a hands-on experience with a variety of measurement instrumentation. Lecture with lab activities 2 hours. Prerequisites: ENGR 2113 and successful completion of or concurrent enrollment in ENGR 2153.

ENGR 3122 HEAT TRANSFER AND FLUID MECHANICS LAB *2 credit hours* Basic measurement concepts in fluid mechanics and thermal science. Concepts and methods of measuring pressure, temperature, flow, thermal and transport properties. Lecture with lab activities 2 hours. Prerequisites: ENGR 3112 and successful completion of or concurrent enrollment in ENGR 3173.

ENGR 3173 HEAT TRANSFER *3 credit hours* Introduction of basic thermal-energy transport processes: conduction, convection, heat exchanger design and analysis, radiation, mass transfer, and multiphase behavior. Numerical methods, dimensional analysis, and boundary layer theory will be explored. Lecture 3 hours. Prerequisite: ENGR 2223.

ENGR 4491-3 SPECIAL PROBLEMS IN ENGINEERING *1-3 credit hours* Guided research in the engineering sciences. Arranged. Independent study/directed readings 1-3 hours. Prerequisite: MATH 2215.

ENGLISH (ENGL)

Communication, English, and Foreign Languages

ENGL 0113 DEVELOPMENTAL WRITING *Developmental course, no credit* 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. Individual conferences are arranged as needed. Does not satisfy any degree requirement for any degree program at Cameron University. Lecture 3 hours.

ENGL 0403 ENGLISH FOR ACADEMIC PURPOSES I *Developmental course, no credit* This course is designed to prepare intermediate-level ESL students for academic reading/writing and listening/speaking tasks in college. Attention to the development of language skills is integrated into the course's emphasis upon writing paragraphs and short essays. May be used as an alternative to ENGL 0103 by students for whom English is a foreign language and who score below a 16 on the English ACT test or below 65 on the CPT Sentence Skills Test. Does not satisfy degree requirements for any degree program at Cameron University. Lecture 3 hours.

ENGL 0413 ENGLISH FOR ACADEMIC PURPOSES II *Developmental course, no credit* This course is designed to prepare high-intermediate and advanced ESL students for higher level academic reading/writing and listening/speaking tasks in college. Attention to the development of language skills is integrated into the course's emphasis upon essay writing. May be used as an alternative to ENGL 0113 by students for whom English is a foreign language and who score above 15 but below 19 on the English ACT test or above 64 but below 96 on the CPT Sentence Skills Test. Does not satisfy degree requirements for any degree program at Cameron University. Lecture 3 hours.

ENGL 0512 SUPPLEMENTAL WRITING INSTRUCTION *2 credit hours* Writing tutorial providing remediation and support for those students who are enrolled in ENGL 1113, but whose test scores and prior coursework do not indicate preparedness for college-level writing classes. Does not satisfy major requirements for any degree program at Cameron University. Lecture 2 hours. Prerequisite: Satisfactory placement score. Corequisite: ENGL 1113.

ENGL 1113* ENGLISH COMPOSITION I *3 credit hours* This course provides an introduction to college-level writing with particular focus on understanding and applying genre conventions, recognizing and adapting to different rhetorical situations, and using critical thinking skills to read, analyze, and write college-level texts. Lecture 3 hours. General Education, Communication.

ENGL 1213* ENGLISH COMPOSITION II *3 credit hours* This course provides instruction in academic writing and research techniques and builds upon the skills developed in English Composition I. Students will learn how to find and evaluate research materials; construct and support academic arguments; and incorporate and properly attribute outside material in their own writing. Lecture 3 hours. Prerequisite: ENGL 1113. General Education, Communication.

ENGL 2013* POPULAR FICTION *3 credit hours* Reading and discussion of twentieth-century short stories and novels. Lecture 3 hours. Prerequisite: ENGL 1213. General Education, Humanities–Aesthetics.

ENGL 2053* FILM AS LITERATURE *3 credit hours* 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. General Education, Humanities–Aesthetics.

ENGL 2313* AFRICAN AMERICAN LITERATURE *3 credit hours* A survey of writings by African American authors from Colonial times to the present. Lecture 3 hours. General Education, Humanities–Aesthetics and Humanities–Diversity.

ENGL 2323* INDIGENOUS AMERICAN LITERATURE *3 credit hours* Examination of Indigenous American literature from a range of traditions and time periods. Lecture 3 hours. General Education, Humanities–Aesthetics and Humanities–Diversity.

ENGL 2333 INTRODUCTION TO TECHNICAL WRITING *3 credit hours* Introduces students to the basic 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.

ENGL 2343* WOMEN IN LITERATURE 3 credit hours Historical and analytical exploration of the images of women in literature, with emphasis on women writers. Lecture 3 hours. General Education, Humanities–Aesthetics and Humanities–Diversity.

ENGL 2413* THE BIBLE AS LITERATURE *3 credit hours* A literary approach to the Old and New Testaments. Students analyze form, structure and influence of representative biblical literature. Lecture 3 hours. Prerequisite: ENGL 1213.

ENGL 2983* STUDIES IN YOUNG ADULT LITERATURE *3 credit hours* Through the study of literary and other cultural texts, students will explore the course theme/topic as expressed in different genres and by diverse authors in Young Adult Literature. Lecture 3 hours. (Spring)

ENGL 3003* INTRODUCTION TO LITERARY STUDIES *3 credit hours* 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. (Fall)

ENGL 3023* SURVEY OF AMERICAN LITERATURE TO 1865 *3 credit hours* A survey of American literature from its beginning to Whitman. Lecture 3 hours. Prerequisite: ENGL 1213.

ENGL 3033* SURVEY OF AMERICAN LITERATURE SINCE 1865 *3 credit hours* A survey of American literature from Whitman to the present. Lecture 3 hours. Prerequisite: ENGL 1213.

ENGL 3043* SURVEY OF ENGLISH LITERATURE TO 1800 *3 credit hours* A survey of English literature from its beginning to the close of the eighteenth century. Lecture 3 hours. Prerequisite: ENGL 1213.

ENGL 3053* SURVEY OF ENGLISH LITERATURE SINCE 1800 *3 credit hours* A survey of English literature from the beginning of the nineteenth century to the present. Lecture 3 hours. Prerequisite: ENGL 1213.

ENGL 3063* SURVEY OF WORLD LITERATURE THROUGH THE RENAISSANCE *3 credit hours* Readings in world literature from classical antiquity to 1700, with emphasis on major authors. Lecture 3 hours. Prerequisite: ENGL 1213.

ENGL 3073* SURVEY OF WORLD LITERATURE SINCE THE RENAISSANCE *3 credit hours* Reading of major works in world literature from the post-Renaissance period to the present. Lecture 3 hours. Prerequisite: ENGL 1213.

ENGL 3113* STUDIES IN SHAKESPEARE *3 credit hours* Interpretation and criticism of selected works of Shakespeare. May be repeated to a total of 6 hours. Lecture 3 hours. Prerequisites: Successful completion of ENGL 1213 and ENGL 3003. Completion of ENGL 3813 recommended.

ENGL 3303* ADVANCED COMPOSITION *3 credit hours* Critical scrutiny of the structure and style of prose. Study of how rhetorical principles are used and can be taught. Frequent papers. Lecture 3 hours. (Cross-listed with ENGL 5123) (Spring)

ENGL 3663* TEACHING READING IN SECONDARY SCHOOLS *3 credit hours* A course focusing on teaching reading processes in secondary schools. This course will assist students in: 1) selecting literature and understanding adolescent readers; 2) planning and pedagogy for literature study for all students; 3) using research-based ideas and best practices in reading to engage students in deeper literacy; 4) using reading processes to teach students about social justice, diversity, and equity; and 5) close reading strategies in the classroom. Lecture 3 hours. Prerequisite: ENGL 1213 with a grade of C or better; admission to Teacher Education or Departmental approval. (Fall)

ENGL 3813* LITERARY THEORY *3 credit hours* An examination of the concepts that guide evaluation, interpretation, and appreciation of literature. Students will acquaint themselves with different theoretical approaches to literature and apply those approaches to specific texts so as to better understand the role of literary theory in the study of literature. Lecture 3 hours. Prerequisite: ENGL 3003. (Cross-listed with ENGL 5313) (Fall)

ENGL 3881-3* WORKSHOP *1-3 credit hours* Designed to emphasize special topics in English and the Language Arts. May be repeated with department permission. Workshop 1-3 hours.

ENGL 4013* MAJOR AUTHORS *3 credit hours* Intensive study of one or more major authors. Topics may include

Chaucer, Milton, Wordsworth, Hawthorne, Dickinson, Hemingway, Morrison, Chekov, Dostoevsky, and others. May be repeated to a total of 6 hours. Lecture 3 hours.

ENGL 4023* STUDIES IN GENRE *3 credit hours* Intensive study of a literary genre, with particular attention to formal characteristics and conventions and how they change over time. Topics may include the English novel, the modern English novel, the American novel, the contemporary American novel, modern American and British poetry, contemporary poetry, American drama, and others. May be repeated to a total of 6 hours. Lecture 3 hours.

ENGL 4053* SEMINAR IN LITERATURE *3 credit hours* 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.

ENGL 4133* STUDIES IN AMERICAN LITERATURE *3 credit hours* Through the study of literary and other cultural texts, students will explore the course theme/topic as expressed in different literary movements, periods, genres and by diverse authors in American Literature. May be repeated to a total of 6 hours. Lecture 3 hours. Prerequisites: ENGL 1213 and ENGL 3003. (Fall)

ENGL 4143* STUDIES IN BRITISH LITERATURE *3 credit hours* Through the study of literary and other cultural texts, students will explore the course theme/topic as expressed in different literary movements, periods, genres and by diverse author in British Literature. May be repeated to a total of 6 hours. Lecture 3 hours. Prerequisites: ENGL 1213 and ENGL 3003. (Fall)

ENGL 4153 *STUDIES IN WORLD LITERATURE *3 credit hours* Through the study of literary and other cultural texts, students will explore the course theme/topic as expressed in different literary movements, periods, genres and by diverse authors in World Literature. May be repeated to a total of 6 hours. Lecture 3 hours. Prerequisites: ENGL 1213 and ENGL 3003. (Spring)

ENGL 4613* ENGLISH LINGUISTICS *3 credit hours* 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. (Cross-listed with ENGL 5713) (Spring)

ENGL 4623* ADVANCED GRAMMAR AND USAGE *3 credit hours* A review of formal English grammar; improvement and practice in functional grammar and usage. Lecture 3 hours. (Cross-listed with ENGL 5003) (Fall)

ENGL 4633* RHETORIC: THEORY AND APPLICATION *3 credit hours* 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.

ENGL 4643* OLD AND MIDDLE ENGLISH *3 credit hours* A study of Old and Middle English, with readings in prose and poetry. Lecture 3 hours. Prerequisite: ENGL 4613 or permission of the department.

ENGL 4773 TEACHING OF ENGLISH *3 credit hours* 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: department permission. (Fall)

ENGL 4961-3* DIRECTED READINGS IN ENGLISH *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: permission of the Chair.

ENGL 4983 WRITING INTERNSHIP *3 credit hours* Field experience in writing under close supervision of a field-based supervisor and professor. May be repeated once. Internship/field experience 3 hours. Prerequisites: 12 hours of writing courses not including ENGL 1113 or 1213 and permission of the chair.

ENGL 4993* ENGLISH CAPSTONE *3 credit hours* Relevant reading and discussion assists graduating English majors in reflecting on their own growth as readers and writers of text over their undergraduate careers and in synthesizing material from various individual courses into a more meaningful understanding of the discipline as a whole. The course also helps prepare students for the workplace and/or graduate school. To be taken in the student's final semester. Lecture 3 hours. (Spring)

ENVIRONMENTAL SCIENCE (ENSC)

Agriculture, Biology, and Health Sciences

ENSC 2004* INTRODUCTION TO ENVIRONMENTAL SCIENCE *4 credit hours* 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. General Education, Biological Science.

ENSC 3103 PRINCIPLES OF WATER RESOURCES *3 credit hours* An introduction to the science and policy related to managing fresh water resources. Fundamental hydrologic processes, how the United States has managed water throughout history, and the environmental impact of water resources management. Lecture 3 hours. Prerequisites: AGRC 1124/1124L or AGRC 1214/1214L or AGRC 2013. Will not satisfy general education science requirements.

ENSC 3203 PRESCRIPTION BURNING AND GRAZING MANAGEMENT *3 credit hours* Applications of principles and recent advances in knowledge in fire ecology and in applications of prescription burning and livestock grazing to the sustainable management of rangelands. Field trips are required. Lecture 3 hours. Prerequisite AGRC 1124/1124L or AGRC 1214/1214L or AGRC 2013. Will not satisfy general education science requirements.

FAMILY SCIENCE (FAMS)

Psychology

FAMS 1123* FAMILY RELATIONS *3 credit hours* An examination of research, issues, challenges, opportunities, and trends relating to family interaction and decision making over the life-span. Lecture 3 hours. General Education, Behavioral Science. (Fall, Spring)

FAMS 3143* PARENTHOOD EDUCATION *3 credit hours* 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. Lecture 3 hours. Prerequisite: FAMS 1123, junior standing or permission of the department. (Spring)

FAMS 3153* HUMAN SEXUALITY *3 credit hours* A general investigation of human sexuality against a background of changing sexual mores for physiological, psychological, and sociological perspective. Exploration of current issues and implication for future trends in human interaction. Special emphasis on the development of healthy interpersonal relationships. Lecture 3 hours. (Fall, Spring)

FAMS 4123* MARRIAGE *3 credit hours* Identification and analysis of stressors in contemporary marriages. Strategies for enrichment will be emphasized. Lecture 3 hours. Prerequisite: FAMS 1123 or PSY 1113.

FAMS 4133* MILITARY FAMILIES *3 credit hours* This course will emphasize the unique culture of military families, their resilience, and the challenges of military life. A review of the latest research, theories, policies, and programs is included to prepare students for understanding and working with military families. Lecture 3 hours. Prerequisite: FAMS 1123 or PSY 1113 or SOCI 1113.

FAMS 4143* CRISIS MANAGEMENT AND RESOURCES *3 credit hours* 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. Lecture 3 hours. Prerequisite: Junior standing or permission of the department. (Fall, Odd Years)

FAMS 4163 HEALTHY AGING *3 credit hours* Emphasis on demographic changes due to longevity; differences between aging and illness; and effects of aging that may be reversible. Lecture 3 hours. Prerequisite: Prerequisite: FAMS 1123 or PSY 1113.

FAMS 4173 FUNCTIONAL FAMILY SYSTEMS *3 credit hours* Emphasizes the family unit as a communicational, instructional, and interactional system. Lecture 3 hours. Prerequisite: FAMS 1123, junior standing, or permission of the department.

FAMS 4333 CURRENT ISSUES IN FAMILY DIVERSITY *3 credit hours* An in-depth study of the historical, current, and projected demographic trends of American families. Students will examine the impact of increasing cultural diversity of American families on family theory, research, and service delivery. Emphasis placed on the experiences, challenges, and strengths, of families in poverty in the U.S. Prerequisite: FAMS 1123 or SOCI 1113. (Spring, Odd Years)

FAMS 4702 CAREER RESEARCH AND PROFESSIONAL DEVELOPMENT *2 credit hours* This course will include supervised research and observation in areas of career interest to students, and development in resume building, interviewing skills, and professionalism. Prerequisite: CD 1113, CD 1123, CD 3223, FAMS 1123, FAMS 3143, FAMS 4333 (Fall, Spring, Summer)

FAMS 4803 FAMILY LIFE EDUCATION *3 credit hours* This course will emphasize the theoretical and research foundations of family life education, including principles and methods for reaching out to the public, and how to form and use community collaborations. Lecture 3 hours. Prerequisites: FAMS 1123 and FAMS 3143.

FAMS 4881-4 INDEPENDENT STUDY IN FAMILY SCIENCE *1-4 credit hours* 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. Independent study/directed readings 1-4 hours. Prerequisite: Permission of the department.

FAMS 4901-3 SEMINAR IN FAMILY SCIENCE *1-3 credit hours* A course designed to meet the special needs within the department. May be repeated with a different topic for a total of 6 hours. Seminar 1-3 hours. Prerequisite: Permission of the department.

FINANCE (FIN)

Business

FIN 2113 PERSONAL FINANCE *3 credit hours* 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. (Fall, Spring)

FIN 3313* MONEY AND BANKING *3 credit hours* Evolution of money and banking; organization operation of chartered banks and other financial institutions; the role of the Federal Reserve System and financial institutions in the money supply process, demand for money; monetary policy, regulations of the financial system, foreign exchange market. Lecture 3 hours. Prerequisite: ECON 2023. (Cross-listed with ECON 3313.) (Spring)

FIN 3603* PRINCIPLES OF FINANCE *3 credit hours* An introductory course in financial management of a firm. Areas covered include an overview of financial management; financial markets, institutions and interest rates; time value of money, risk and return, valuation of stocks and bonds; long-term investment and financing decisions; working capital management and multinational financial management. Lecture 3 hours. Prerequisites: ACCT 2013. (Fall, Spring)

FIN 3623 INVESTMENTS *3 credit hours* 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 the Chair.

FIN 4333 FINANCIAL MANAGEMENT *3 credit hours* A detailed examination of financial management decision making techniques. Topics include cash and profit planning, asset management, capital structure, capital budgeting, and firm valuation, including mergers and acquisitions. Lecture 3 hours. Prerequisite: FIN 3603.

FIN 4453 BOND ANALYSIS *3 credit hours* Participation in the management of the ongoing BancFirst-Cameron Foundation Investment Portfolio. Activities center on administering a diversified portfolio of fixed income assets. Lecture 3 hours. Prerequisite: FIN 3603.

FIN 4553 STOCK ANALYSIS *3 credit hours* Participation in the management of the ongoing BancFirst-Cameron Foundation Investment Portfolio. This course provides an opportunity for students to refine skills and pursue intensive study of investment in common stock and derivative securities. Lecture 3 hours. Prerequisite: FIN 3603.

FIN 4471-3 SEMINAR IN FINANCE *1-3 credit hours* Seminar presentation and special studies in topics of current interest in finance. Seminar 1-3 hours.

FINE ARTS (FNAR)

Art, Music, and Theatre Arts

FNAR 1013* EXPLORING MULTICULTURALISM THROUGH THE ARTS *3 credit hours* 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. General Education, Humanities–Aesthetics and Humanities–Diversity.

FRENCH (FREN)

Communication, English, and Foreign Languages

FREN 1113* BEGINNING FRENCH I *3 credit hours* An introductory course in the language and culture of French-speaking countries. Lecture 3 hours. General Education, Humanities–Diversity. (Fall)

FREN 1223* BEGINNING FRENCH II *3 credit hours* Continuation of FREN 1113. Lecture 3 hours. Prerequisite: FREN 1113 or equivalent. General Education, Humanities–Diversity. (Spring)

FREN 2113* INTERMEDIATE FRENCH I *3 credit hours* 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. (Fall)

FREN 2223* INTERMEDIATE FRENCH II *3 credit hours* Continuation of FREN 2113. Lecture 3 hours. Prerequisite: FREN 2113 or the equivalent. (Spring)

FREN 3113* FRENCH GRAMMAR AND LINGUISTICS *3 credit hours* 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.

FREN 3123* FRENCH CULTURE *3 credit hours* A systematic review of French culture. Conducted in French. Lecture: 3 hours. Prerequisite: FREN 2223 or equivalent.

FREN 3133* FRENCH COMPOSITION *3 credit hours* 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.

FREN 3143* FRENCH CONVERSATION *3 credit hours* 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.

FREN 4113* L'HISTOIRE DE FRANCE *3 credit hours* 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.

FREN 4123* FRENCH ECRIVAINS PROSODIQUES *3 credit hours* 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.

FREN 4133* FRENCH POETS AND DRAMATISTS *3 credit hours* A study of the various trends in French poetry and drama. Conducted in French. Lecture 3 hours. Prerequisite: FREN 4123 or equivalent.

FREN 4143* FRENCH FOR BUSINESS AND INDUSTRY *3 credit hours* 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.

FREN 4961-3* DIRECTED READINGS IN FRENCH *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: FREN 4143 or equivalent.

GEOGRAPHY (GEOG)

Social Sciences

GEOG 1014* PHYSICAL GEOGRAPHY *4 credit hours* A basic introduction to the physical elements of the Earth as they relate to humans. The influence of such factors as soils and minerals, landforms, and hydrography, vegetation, weather, and climate are emphasized. This course is designed for non-science majors. Lecture/Demonstration, 4 hours. General Education, Physical Science.

GEOG 2243* HUMAN GEOGRAPHY *3 credit hours* The principles of geography in its human aspects and its relationship to the cultural patterns of the world. Lecture 3 hours. General Education, Humanities-Diversity. (Fall)

GEOG 3023* ECONOMIC GEOGRAPHY *3 credit hours* 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. General Education, Economics. (Fall, Spring)

GEOG 3213* WORLD REGIONAL GEOGRAPHY *3 credit hours* Comparative study of the world's major geographic regions as defined by interrelated complexes of physiographic and cultural elements. Lecture 3 hours. (Spring)

GEOG 3391-3* INDEPENDENT STUDY *1-3 credit hours* Intensive independent readings on or study of a specific topic in geography, based upon a pre-approved plan of study and action, with regular conferences and written and/or oral reports required. Independent study/directed readings 1-3 hours. Prerequisites: junior standing, prior completion of at least 6 credit hours in geography, and permission of instructor. May not be taken for elective credit for the Social Studies Education major. May be repeated with a different topic for a total of 6 hours of credit.

GERMAN (GERM)

Communication, English, and Foreign Languages

GERM 1113* BEGINNING GERMAN I *3 credit hours* An introductory course in the language and culture of German-speaking countries. Lecture 3 hours. General Education, Humanities–Diversity. (Fall)

GERM 1223* BEGINNING GERMAN II *3 credit hours* Continuation of GERM 1113. Lecture 3 hours. Prerequisite: GERM 1113 or equivalent. General Education, Humanities–Diversity. (Spring)

GERM 2213* INTERMEDIATE GERMAN I *3 credit hours* An intermediate-level course in the German language, with emphasis on the more complex idiomatic, syntactic, and grammatical forms. Lecture 3 hours. Prerequisite: GERM 1223 or equivalent. (Fall)

GERM 2223* INTERMEDIATE GERMAN II *3 credit hours* Continuation of GERM 2213. Conducted largely in German. Lecture 3 hours. Prerequisite: GERM 2213 or equivalent. (Spring)

GERM 3013* GERMAN GRAMMAR AND LINGUISTICS *3 credit hours* A systematic review of German grammar; a study of the phonology, morphology, syntax, and semantics of modern Standard German. Lecture 3 hours. Prerequisite: GERM 2223 or equivalent.

GERM 3043* GERMAN CULTURE *3 credit hours* A systematic review of German culture. Conducted in German. Lecture 3 hours. Prerequisite: GERM 3013 or equivalent.

GERM 3113* GERMAN COMPOSITION *3 credit hours* Cultivation of the facility of writing in German. Conducted in German. Lecture 3 hours. Prerequisites: GERM 3013 and GERM 3043 or equivalent.

GERM 3123* GERMAN CONVERSATION *3 credit hours* Cultivation of the facility of communicating in spoken German. Conducted in German. Lecture 3 hours. Prerequisites: GERM 3013 and GERM 3043 or equivalent.

GERM 4961-3* DIRECTED READINGS IN GERMAN *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: GERM 3123 or equivalent.

HISTORY (HIST)

Social Sciences

HIST 1113* EARLY WORLD HISTORY *3 credit hours* Survey of world history from the earliest times to 1400. Lecture 3 hours. General Education, Humanities–Diversity. (Fall)

HIST 1123* MODERN WORLD HISTORY *3 credit hours* Survey of world history from 1400 to the present. Lecture 3 hours. General Education, Humanities–Diversity. (Spring)

HIST 1483* UNITED STATES HISTORY TO 1865 *3 credit hours* Introductory survey from European backgrounds through the Civil War. Lecture 3 hours. Prerequisite: Students must be eligible for ENGL 1113. General Education, U.S. History. (Fall, Spring)

HIST 1493* UNITED STATES HISTORY SINCE 1865 *3 credit hours* A survey of the development of the United States from 1865 to the present. Lecture 3 hours. Prerequisite: Students must be eligible for ENGL 1113. General Education, U.S. History. (Fall, Spring)

HIST 2113* WESTERN CIVILIZATION I *3 credit hours* 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. Lecture 3 hours. General Education, Humanities–Diversity. (Fall)

HIST 2223* WESTERN CIVILIZATION II *3 credit hours* 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. Lecture 3 hours. General Education, Humanities–Diversity. (Spring)

HIST 3033* RACE AND THE ATLANTIC WORLD, 1400-1850 *3 credit hours* 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: ENGL 1213, and HIST 1113, or HIST 1123, or HIST 2113, or HIST 2223, or HUM 2713, or ENGL 3063, or ENGL 3073, or ART 2613, or ART 2623. HIST 2133 strongly recommended.

HIST 3043* OKLAHOMA HISTORY *3 credit hours* A survey of the development of Oklahoma from the time of the discovery of America to the present. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or HIST 1493. HIST 2133 strongly recommended. (Spring)

HIST 3123* THE CRUSADES, 1095-1798 *3 credit hours* From the middle of the 10th century C.E. through the early 16th century, Europeans and the peoples of North Africa and the Eastern Mediterranean interacted with a greater intensity than ever before, inaugurating a complex history of interaction that has been with us ever since. In origin a religiously motivated enterprise on the European side that aimed at nothing less than the reclamation of the Holy Land for Christianity, the Crusades rapidly became both more and less than this. Less in the sense that conflict did not always happen for religious reasons, more in that the practices of crusading spread far beyond the Holy Land to encompass the Iberian Peninsula, Eastern Europe, and, perhaps most ironically of all, the Christian Byzantine empire. In this course we will address crusading in all of its forms form the High Middle Ages to the dawn of the Reformation. We will also seek to tell the stories of all involved to explore crusading as a cultural, economic, and social phenomenon as well as examining its more familiar military, religious, and political sides. In the process we will explore current controversies among scholars and in popular culture concerning what the Crusades were and what they mean to people today. Lecture 3 hours. Prerequisites: ENGL 1213, and HIST 1113, or HIST 1123, or HIST 2113, or HIST 2223, or HUM 2713, or ENGL 3063, or ENGL 3073, or ART 2613, or ART 2623. HIST 2133 strongly recommended.

HIST 3133* AMERICAN MILITARY HISTORY *3 credit hours* A survey of American military history from American Revolution to the present. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or 1493.

HIST 3243* BRITAIN SINCE 1689 *3 credit hours* Emergence of cabinet government, the Industrial Revolution, the Napoleonic era and empire problems, and the development of Britain to the present. Lecture 3 hours. Prerequisites: ENGL 1213, and HIST 1113, or HIST 1123, or HIST 2113, or HIST 2223, or HUM 2713, or ENGL 3063, or ENGL 3073, or ART 2613, or ART 2623. HIST 2133 strongly recommended.

HIST 3391-3* INDEPENDENT STUDY *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisites: HIST 2133, 15 additional hours of history and permission of instructor. May be repeated with a different topic for a total of 6 hours credit.

HIST 3483* PUBLIC HISTORY INTERNSHIP *3 credit hours* An intensive exposure to and involvement in work done by public historians at area museums. Students will work with primary sources, document collections, artifacts, public displays, educational and marketing publications, and make presentations to the public or to museum staff under the direction of a Cameron University faculty member in partnership with a supervising historian or other qualified professional at the museum. The student, the supervisor at the museum, and the directing Cameron faculty member will sign an agreement stipulating terms of the internship in advance. Internship 3 hours. Prerequisite: 3.0 Retention GPA, ENGL 1213, 18 hours of history, and the permission of the directing faculty member and the chair of the department. HIST 2133 strongly recommended.

HIST 3583* HISTORICAL RESEARCH AND WRITING *3 credit hours* An intensive exploration of the research methods used in history, with emphasis on the gathering, evaluation, organization, interpretation, and effective presentation of various types of evidence to specific audiences. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or HIST 1493. (Fall)

HIST 4123* AMERICAN WOMEN AND POLITICS *3 credit hours* A survey of American women from the colonial period to present with emphasis on their changing socio-economic and political roles. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or HIST 1493. HIST 2133 strongly recommended.

HIST 4243* AMERICAN COLONIAL HISTORY *3 credit hours* The political, economic, social, and cultural history of the colonies in North America from the earliest settlements through 1763. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or HIST 1493. HIST 2133 strongly recommended.

HIST 4253* THE AMERICAN REVOLUTION AND EARLY NATIONAL PERIOD *3 credit hours* A history of the causes and consequences of the War for American Independence and the early years of the United States. Includes the drafting and adoption of the U.S. Constitution, the organization of the first national government, the formation of political parties, territorial expansion, foreign policy, economic development, and the emerging conflict between nationalism and sectionalism through 1815. Lecture 3 hours. Prerequisite: ENGL 1213 and HIST 1483 or HIST 1493. HIST 2133 strongly recommended.

HIST 4273* THE AGE OF JACKSON AND AMERICAN EXPANSION, 1815-1848 *3 credit hours* A political history of the period between 1815 and 1848. The impact of nationalism, liberalism, and sectionalism upon American life in the middle period. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or HIST 1493. HIST 2133 strongly recommended.

HIST 4283* THE CIVIL WAR AND RECONSTRUCTION, 1848-1877 *3 credit hours* The coming of the war; 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; and an intensive study of the major challenges facing the United States in the aftermath of the Civil War. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or HIST 1493. HIST 2133 strongly recommended.

HIST 4293* THE GILDED AGE AND PROGRESSIVE ERA, 1877-1920 *3 credit hours* A study of the major events and movements in the United States between 1877 and approximately 1920. Special attention is given to the rise of modern industrialism and the organization of labor and farmers. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or HIST 1493. HIST 2133 strongly recommended.

HIST 4313* WAR AND DEPRESSION, 1917-1945 *3 credit hours* The United States in the aftermath of World War I; the Roaring Twenties; the Great Depression; and World War II. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or HIST 1493. HIST 2133 strongly recommended.

HIST 4323* COLD WAR AMERICA, 1945-1991 *3 credit hours* A study of the political, economic, social, cultural and diplomatic changes in America between 1945 and 1991. Topics include civil rights, the Cold War, consumerism, social change, and others. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or HIST 1493. HIST 2133 strongly recommended.

HIST 4353* FRONTIER EUROPE, 1300-1800 *3 credit hours* Europe, too, had a frontier that definitively shaped its pre-modern foundations. 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 Britain, Denmark-Norway, northern Germany, Sweden, Poland, and the northern Low Countries, which collectively, constituted the heart of the European frontier. Lecture 3 hours. Prerequisites: ENGL 1213, and HIST 1113, or HIST 1123, or HIST 2113, or HIST 2223, or HUM 2713, or ENGL 3063, or ENGL 3073, or ART 2613, or ART 2623. HIST 2133 strongly recommended.

HIST 4373* EUROPE 1789-1914 *3 credit hours* Europe during the French Revolution and Napoleonic Era; the Congress of Vienna and the Congress system; the revolutions of 1830 and 1848; the unification of Italy and Germany; industrialism, social change, and the coming of World War I. Lecture 3 hours. Prerequisites: ENGL 1213, and HIST 1113, or HIST 1123, or HIST 2113, or HIST 2223, or HUM 2713, or ENGL 3063, or ENGL 3073, or ART 2613, or ART 2623. HIST 2133 strongly recommended.

HIST 4413* RELIGION AND MAGIC IN EARLY MODERN EUROPE, 1400-1650 *3 credit hours* From the 15th to the mid-17th centuries, religious relationships changed dramatically within European societies. One path of change led to the Reformation, producing Protestant alternatives to what we now know as Catholicism. Another path led to bureaucratized and centralized power that tied community membership to shared religious outlooks. From care for the poor, the sick, and the elderly to marriage and tolerance of diversity, peoples' lives were transformed, while politics took on a more religious and, often, deadly turn, culminating in the Thirty Years' War. Perhaps the most dramatic path of all concerned the reform, even repression of popular religion as European societies attempted to root out witchcraft and newly vigilant and pious elites struggled to stamp out what they saw as superstition and worse. In this course, we explore these and other manifestations of the cataclysmic change that characterized this era. Lecture 3 hours. Prerequisites: ENGL 1213, and HIST 1113, or HIST 1123, or HIST 2113, or HIST 2223, or HUM 2713, or ENGL 3063, or ENGL 3073, or ART 2613, or ART 2623. HIST 2133 strongly recommended.

HIST 4443* 20TH CENTURY EUROPEAN HISTORY *3 credit hours* The quest for security in the 1920's; the rise of the dictators; the road to World War II; the emergence of an integrated Europe; and the Cold War and its aftermath. Lecture 3 hours. Prerequisites: ENGL 1213, and HIST 1113, or HIST 1123, or HIST 2113, or HIST 2223, or HUM 2713, or ENGL 3063, or ENGL 3073, or ART 2613, or ART 2623. HIST 2133 strongly recommended.

HIST 4473* HEROES AND VILLAINS OF THE FRENCH REVOLUTION, 1780-1815 *3 credit hours* The French Revolution is, in the minds of some, the first modern revolution, making it one of the pivotal moments informing the shape of modernity. In this course we take a unique approach to this era by looking at the Revolution through the eyes of those who most influenced it. Using biographies, memoirs, diaries, and other first-hand accounts, we will explore the unfolding and wider implications of the French Revolution by trying to understand each of their particular perspectives on its own terms, even as we acknowledge that in an event such as the French Revolution, some have come down to us as heroic figures and some as villains. Lecture 3 hours. Prerequisites: ENGL 1213, and HIST 1113, or HIST 1123, or HIST 2113, or HIST 2223, or HUM 2713, or ENGL 3063, or ENGL 3073, or ART 2613, or ART 2623. HIST 2133 strongly recommended.

HIST 4773 METHODS OF TEACHING SOCIAL STUDIES *3 credit hours* An intensive study of the problems and methods associated with teaching Social Studies at the Secondary level. Lecture 3 hours. Offered fall semester only. Prerequisite: EDUC 3003 or concurrent enrollment. (Fall)

HIST 4790* SENIOR HISTORY CAPSTONE *0 credit hours* A capstone course for History majors that should be taken immediately prior to graduation. Course requirements include completing all required program assessment, submitting a research paper to an undergraduate research journal, and preparing a vita/resumet to assist with entering the job market, Capstone/lecture 0 hours. Prerequisites: 18 hours of History strongly recommended.

HIST 4793* SENIOR SEMINAR IN HISTORY *3 credit hours* 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. Capstone/lecture 3 hours. Prerequisites: 18 hours of history including HIST 2133 strongly recommended. (Spring, Even Years)

HIST 4961-3* SELECTED TOPICS IN UNITED STATES HISTORY *1-3 credit hours* An intensive analysis of a selected problem or topic in United States history. May be repeated, with a different topic, for additional credit. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1483 or HIST 1493. HIST 2133 strongly recommended.

HIST 4971-3* SELECTED TOPICS IN EARLY MODERN EUROPEAN AND WORLD HISTORY *1-3 credit hours* An intensive analysis of a selected problem or topic in Early Modern European or World history. May be repeated, with a different topic, for additional credit. Lecture 3 hours. Prerequisites: ENGL 1213 and HIST 1113 or HIST 1123 or HIST 2113 or HIST 2223 or HUM 2713 or ENGL 3063 or ENGL 3073 or ART 2613 or ART 2623. HIST 2133 strongly recommended.

INFORMATION TECHNOLOGY (IT)

Computing and Mathematical Sciences

IT 1013* INTRODUCTION TO COMPUTER SYSTEMS *3 credit hours* This course is an overview of what students need to know to successfully navigate/adapt in the ever-changing landscape of computing and communications technologies. Lecture 3 hours. Prerequisite: None. (Fall, Spring) (Formerly CIS 1013)

IT 1063 INTRODUCTION TO NETWORKING *3 credit hours* An overview of computer networking. Topics include network topologies, network software, the client-server model, the OSI/ISO model, network components, TCP/IP, and network security. Lecture 3 hours. Prerequisite: IT 1013 or concurrent enrollment. (Fall)

IT 1213 PROGRAMMING LOGIC *3 credit hours* A basic introduction to the knowledge and skills that are used in computer programming. Topics include: the third-generation programming environment, program design and pseudocode, coding, debugging, basic control structures, basic classes and objects, and methods. Lecture 3 hours.

IT 1414 PROGRAMMING I *4 credit hours* 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, laboratory 2 hours. Prerequisite: MATH 1513 or concurrent enrollment or permission of department. Corequisite: IT 1414L. (Spring)

IT 1414L PROGRAMMING I LAB *0 credit hours* 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, laboratory 2 hours. Prerequisite: MATH 1513 or concurrent enrollment or permission of department. Corequisite: IT 1414. (Spring)

IT 1733 LINUX/UNIX/WINDOWS *3 credit hours* An introduction to operating systems (Linux/Unix, Windows). Topics include: file system hierarchy, command set, application software, and administrative tasks. Lecture 3 hours.

IT 2033* FUNDAMENTALS OF SYSTEMS ANALYSIS AND DESIGN *3 credit hours* 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. Lecture 3 hours. Prerequisites: IT 1414/1414L or CS 1314/1314L. (Fall) (Formerly CIS 2033)

IT 2064 INTERNETWORKING TECHNOLOGIES *4 credit hours* This course covers technologies, protocols, and techniques used to connect a computer network with other networks and route messages between the networks. Topics include Local Area Networks (LAN), Wide Area Networks (WAN), wireless networks, network services, network security, advanced switching and routing configuration, advanced TCP/IP configuration, and network management. Lecture 3 hours, laboratory 2 hours. Prerequisite: IT 1063. Corequisite: IT 2064L. (Fall, Spring)

IT 2064L INTERNETWORKING TECHNOLOGIES LAB *0 credit hours* LAB: This course covers technologies, protocols, and techniques used to connect a computer network with other networks and route messages between the networks. Topics include Local Area Networks (LAN), Wide Area Networks (WAN), wireless networks, network services, network security, advanced switching and routing configuration, advanced TCP/IP configuration, and network management. Lecture 3 hours, laboratory 2 hours. Prerequisite: IT 1063. Corequisite: IT 2064L. Lecture 3 hours, laboratory 2 hours. Prerequisite: IT 1063. Corequisite: IT 2064. (Fall, Spring)

IT 2414 PROGRAMMING II *4 credit hours* 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, laboratory 2 hours. Prerequisite: IT 1413 or IT 1414/1414L or CS 1313 or CS 1314/1314L. Corequisite: IT 2414L. (Fall)

IT 2414L PROGRAMMING II LAB *0 credit hours* LAB: 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, laboratory 2 hours. Prerequisite: IT 1414/1414L. Corequisite: IT 2414. (Fall)

IT 3000-3 IT WORKSHOP *0-3 credit hours* Designed to give intensive emphasis to a specific area of information technology. May be repeated with a change of content for a maximum of 6 hours credit. Lecture, 0-3 hours. (Formerly TECH 3000-3)

IT 3013* TECHNICAL COMMUNICATIONS *3 credit hours* 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: ENGL 1213 and Junior standing. (Fall) (Formerly TECH 3013)

IT 3033 MANAGING THE INFORMATION TECHNOLOGY CENTER *3 credit hours* Managing the resources of the modern Information Center. Topics include: maximizing the value of data and information technology, IT architectures, digital, mobile and social commerce, enterprise systems and analytics, cybersecurity, compliance and business continuity, functional areas and compliance systems and IT planning, strategy, and IT ethics and responsible conduct. Lecture 3 hours. Prerequisite: IT 2033. (Formerly CIS 3033)

IT 3064 COBOL PROGRAMMING *4 credit hours* 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 multi-dimension tables, sorting and interaction with databases are covered. Lecture 3 hours, laboratory 2 hours. Prerequisite: IT 2413 or IT 2414/2414L or CS 1513 or CS 1514/1514L. Corequisite: IT 3064L. (Formerly CIS 3064)

IT 3064L COBOL PROGRAMMING LAB *0 credit hours* 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 multi-dimension tables, sorting and interaction with databases are covered. Lecture 3 hours, laboratory 2 hours. Prerequisite: IT 2413 or IT 2414/2414L or CS 1513 or CS 1514/1514L. Corequisite: IT 3064. (Formerly CIS 3064L)

IT 3603 HUMAN COMPUTER INTERFACE DEVELOPMENT *3 credit hours* 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 GUIs. Lecture 3 hours. Prerequisite: IT 2413 or IT 2414/2414L or CS 1513 or CS 1514/1514L. (Fall, Spring)

IT 4001-6 IT INTERNSHIP *1-6 credit hours* Directed observation and on-the-job internship served in area directly related to the student's major in the School of Graduate and Professional Studies. The job must be approved by the major advisor prior to starting the internship. Can be repeated for maximum of 6 hours credit. Internship 1-6 hours. Prerequisites: Major advisor permission. (Formerly TECH 4001-6)

IT 4013 RESEARCH TOPICS IN IT *3 credit hours* Applied scholarly research in IT related areas will be conducted. Skills will be developed in utilizing available campus, library, research, and writing resources, as well as external resources. Iterative creation and review of a scholarly paper will be undertaken, using formats common to computing conference publications. Students will be required to present research findings, as is common in computing conference proceedings. Lecture 3 hours. Prerequisite: Must be a bachelor's degree seeking major of the Department of Computing and Mathematical Sciences. Junior or Senior standing. (Spring)

IT 4343* LEGAL AND ETHICAL ISSUES FOR THE IT PROFESSIONAL *3 credit hours* 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 3 hours. Prerequisite: Junior standing. (Spring)

IT 4033 INDUSTRIAL MANAGEMENT SYSTEMS *3 credit hours* 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. (Formerly TECH 4033)

IT 4143 WORKPLACE SAFETY *3 credit hours* 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. Lecture 3 hours. Prerequisite: Junior standing. (Formerly TECH 4143)

IT 4443 IT CAPSTONE *3 credit hours* The IT Capstone course is designed to integrate course work in various specializations of IT classes. This class emphasizes critical thinking and analysis for business decision-making. Students will work in teams to solve/create/implement a service learning group project. This project will be used to demonstrate functional knowledge and skill. Capstone/lecture 3 hours. Prerequisites: Senior standing, and IT 2033, and IT 3603, and CS 3183 or MIS 3033. (Spring)

IT 4491-3 INDEPENDENT STUDY IN IT *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: Junior standing or departmental permission. The total number of hours earned in Independent Study may not exceed four. (Formerly TECH 4491-3)

ITALIAN (ITAL)

Communication, English, and Foreign Languages

ITAL 1113* BEGINNING ITALIAN I *3 credit hours* An introductory course in the language and culture of Italy and other Italian-speaking areas. Lecture 3 hours. General Education, Humanities–Diversity.

ITAL 1223* BEGINNING ITALIAN II *3 credit hours* Continuation of ITAL 1113. Lecture 3 hours. Prerequisite: ITAL 1113 or equivalent. General Education, Humanities–Diversity.

ITAL 2113* INTERMEDIATE ITALIAN I *3 credit hours* An intermediate-level course in the Italian language. A review of grammar, writing, and speaking. Conducted in Italian. Lecture 3 hours. Prerequisite: ITAL 1223.

ITAL 2223* INTERMEDIATE ITALIAN II *3 credit hours* Continuation of ITAL 2113. Conducted in Italian. Lecture 3 hours. Prerequisite: ITAL 2113 or the equivalent.

ITAL 4961-3* DIRECTED READINGS IN ITALIAN *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: ITAL 2223 or equivalent.

JOURNALISM (JOUR)

Communication, English, and Foreign Languages

JOUR 2113* INTRODUCTION TO JOURNALISM *3 credit hours* Mass communication and the importance of the media's role in American society. Lecture 3 hours. Corequisite: ENGL 1113 or ENGL 1123.

JOUR 3133 NEWSPAPER REPORTING *3 credit hours* A laboratory for students to expand the techniques developed in Features, Columns, and Reviews (JRMP 3523). Students will work directly to produce *The Cameron Collegian*. Laboratory 6 hours. Prerequisite: JRMP 3523.

JOUR 3233 ADVANCED NEWSPAPER REPORTING AND DESIGN *3 credit hours* A laboratory for students to continue to expand the techniques developed in Features, Columns, and Reviews (JRMP 3523) 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: JRMP 3523, JOUR 3133, JRMP 3043 and JRMP 3343.

JOUR 3991-3 WORKSHOP *1-3 credit hours* 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. Workshop 1-3 hours.

JOUR 4963 JOURNALISM INTERNSHIP *3 credit hours* Field experience in Journalism under close supervision of employer and professor. Internship/field experience 3 hours. Prerequisite: 12 hours of Journalism or permission of the instructor.

JOUR 4981-3* SPECIAL TOPICS *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: Junior standing.

JOURNALISM AND MEDIA PRODUCTION (JRMP)

Communication, English, and Foreign Languages

JRMP 1113* INTRODUCTION TO MASS MEDIA *3 credit hours* The purpose of this introductory class is to look at the various components of the mass communication industry with special emphasis in convergent mass media: the press, broadcast journalism, digital and social media and the internet. Mass media plays a significant role in our daily lives: this course will survey these interwoven components, including the technical aspects, history, legal and social issues and future ramifications. Lecture 3 hours. (Fall, Spring)

JRMP 1123 MEDIA PERFORMANCE *3 credit hours* A course designed to meet the specific needs of the broadcast and web-based performer; instruction includes drills to develop effective vocal communications as a means of improving audio and video delivery. Lecture 2 hours, laboratory 3 hours.

JRMP 1213* VISUAL MEDIA PRODUCTION *3 credit hours* The purpose of this class is to look at the various components of media graphics including photojournalism and layout design with emphasis on the use of software Photoshop and InDesign. Lecture 3 hours. (Fall, Spring)

JRMP 1313* AUDIO AND VISUAL PRODUCTION *3 credit hours* Introduction to principles and techniques of audio and video production in radio, television, and online applications. Lecture 2 hours, laboratory 3 hours. (Fall, Spring)

JRMP 2243* PHOTOJOURNALISM I *3 credit hours* The study of the principles and techniques of photography with an emphasis on composition and design. Students will learn scanning software and image editing software. Lecture 3 hours.

JRMP 2323* RADIO PRODUCTION *3 credit hours* A look at the equipment in radio studios and its uses in editing, production and creating programs. Lecture 3 hours, laboratory 2 hours. Corequisite: JRMP 2323.

JRMP 2323L* RADIO PRODUCTION LAB *0 credit hours* A look at the equipment in radio studios and its uses in

editing, production and creating programs. Lecture 3 hours, laboratory 2 hours. Corequisite: JRMP 2323L.

JRMP 2333* TV STUDIO PRODUCTION *3 credit hours* An introduction to the basic principles, procedures, and techniques of television studio production. The course includes video control, operation of cameras and editing machines, lighting, staging and directing, on-camera announcing and interviewing. Lecture 2 hours, laboratory 2 hours. Prerequisite: JRMP 1313. Corequisite: JRMP 2333L. (Spring)

JRMP 2333L* TV STUDIO PRODUCTION LAB *0 credit hours* An introduction to the basic principles, procedures, and techniques of television studio production. The course includes video control, operation of cameras and editing machines, lighting, staging and directing, on-camera announcing and interviewing. Lecture 2 hours, laboratory 2 hours. Prerequisite: JRMP 1313. Corequisite: JRMP 2333. (Spring)

JRMP 2513* WRITING FOR MASS MEDIA *3 credit hours* This course will introduce students to the various strategies and styles of writing for mass media organizations that find themselves converging into multiple media institutions. Lecture 3 hours. (Fall)

JRMP 2623* VISUAL COMMUNICATION *3 credit hours* This course is an exploration into why some images are remembered while most are not. This course will explore how we see, why we see, the ethics of what we see, and equip students with a vocabulary for analyzing visual messages. The study of visual communication will change the way a student sees the world. Lecture 3 hours.

JRMP 3223* LAYOUT AND DESIGN *3 credit hours* 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.

JRMP 3343* VIDEO FIELD PRODUCTION AND EDITING *3 credit hours* 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: JRMP 2333. Corequisite: JRMP 3343L.

JRMP 3343L* VIDEO FIELD PRODUCTION AND EDITING LAB *3 credit hours* LAB: 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: JRMP 2333. Corequisite: JRMP 3343.

JRMP 3363 PRODUCING THE DOCUMENTARY *3 credit hours* 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.

JRMP 3423* BROADCAST NEWS *3 credit hours* Theories and practices of broadcast news gathering, writing, delivery, and ethics to develop professional attitude and skills in broadcast and internet news. Lecture 3 hours. Prerequisite: Students must be English Composition I eligible (i.e., have no English deficiencies).

JRMP 3523* FEATURES, COLUMNS, AND REVIEWS *3 credit hours* The purpose of this course is to understand and practice writing news content while accounting for current changes and developments in mass media. This class will emphasize writing from the basis of craft, and we will examine newswriting style and develop writing skills specific to subjective, creative newswriting forms (features, columns, and reviews). Students will learn how to write across newswriting genres while adhering to ethical journalistic standards as dictated in the Society of Professional Journalists' Code of Ethics. Lecture 3 hours. Prerequisite: Students must be English Composition I eligible (i.e., have no English deficiencies).

JRMP 3533* BROADCAST WRITING *3 credit hours* Concept and practices of writing for radio and television. Emphasis on writing news, commercials, and long-form scripts. Lecture 3 hours. Prerequisite: Students must be English Composition I eligible (i.e., have no English deficiencies).

JRMP 3613* MEDIA LITERACY *3 credit hours* The purpose of this class is to look at the various components of the mass media industry with special emphasis on Media Literacy and the impact of Media Literacy on our culture. This course provides a theoretical underpinning and critical analysis to the Journalism and Media Production curriculum. The course is grounded in media theory which espouses the use of literacy education and criticism to analyze mass media effects on society. Lecture 3 hours. Prerequisites: JRMP 1113 and JRMP 2513. (Spring Even)

JRMP 3623* BROADCAST PROGRAMS AND RATINGS *3 credit hours* 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.

JRMP 3633* SOCIAL MEDIA THEORY *3 credit hours* Social Media Theory is the study of the development, impact and significance of social mass media technologies. Students study new social media, develop an analysis model to examine emergent social media, research current social media uses and present findings to their peers. Lecture 3 hours.

JRMP 3721-3 WORKSHOP *1-3 credit hours* Workshop designed to give intensive emphasis to a specific area of media. May be repeated with a different topic for additional credit up to a maximum of six hours. Journalism and Media Production majors may count only three hours of workshops towards their degree. Workshop, 1-3 hours.

JRMP 3811-2 MEDIA PRACTICUM *1-2 credit hours* Participation in all aspects media: radio, television; print online. Practicum, 1-2 hours. Prerequisite: Sophomore standing. (Fall, Spring)

JRMP 4153* MEDIA HISTORY *3 credit hours* Background and development of the early press. Emergence of the partisan press. Evolution of personal and independent journalism. Lecture 3 hours. Prerequisite: Students must be English Composition I eligible (i.e., have no English deficiencies).

JRMP 4233* GRAPHICS FOR VIDEO PRODUCTION *3 credit hour*s 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. Prerequisite: Students must be English Composition I eligible (i.e., have no English deficiencies).

JRMP 4253* PHOTOJOURNALISM II *3 credit hours* 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: JRMP 2243 or instructor's permission.

JRMP 4353* CORPORATE VIDEO *3 credit hours* 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: JRMP 1313.

JRMP 4413 NEWS EDITING *3 credit hours* Study of editing, both practical and theoretical, in the media field. Lecture 3 hours. Prerequisite: Students must be English Composition I eligible (i.e., have no English deficiencies).

JRMP 4433* ONLINE JOURNALISM *3 credit hours* Adapting works for the Internet, incorporating style and format changes to accommodate online audiences. Writing assignments for news and marketing content. Examination of the elements of print and broadcast writing styles that contributes to online content. This course is a thorough review of the differences and similarities that mark the era of media convergence in journalism. Lecture 3 hours.

JRMP 4643* MEDIA LAW *3 credit hours* 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: Students must be English Composition I eligible (i.e., have no English deficiencies).

JRMP 4653* MEDIA MANAGEMENT *3 credit hours* Investigation into various print and broadcast media management functions, sales, network and labor relations, internal organizational structures, operating procedures and government regulations. Lecture 3 hours. Prerequisite: Students must be English Composition I eligible (i.e., have no English deficiencies).

JRMP 4721-3* SPECIAL TOPICS *1-3 credit hours* Directed individual or group study of selected topic(s) in broadcasting or journalism. The course may be repeated. Lecture 1-3 hours.

JRMP 4823 MEDIA 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 a broadcast or journalism area. May be repeated for a maximum of six hours. Internship 3 hours. Prerequisites: Upper division standing and department permission.

LANGUAGE (LANG)

Communication, English, and Foreign Languages

LANG 1001-3* INTRODUCTORY LANGUAGE WORKSHOP *1-3 credit hours* An introductory course that provides beginning study in a selected foreign language, often with a special focus such as survival Spanish or Arabic for military personnel. May be repeated to a total of six hours. Content varies. Lecture 1-3 hours.

LANG 3991-3* IMMERSION EXPERIENCE *1-3 credit hours* Field experience under close supervision of a faculty member in which student gains language proficiency through an immersion in target language environment. Field experience 1-3 hours. Prerequisite: 12 hours study of target language or equivalent and department permission.

LANG 4181-3* SPECIAL TOPICS IN LANGUAGES *1-3 credit hours* Directed individual or group study of selected topics in language. This course may be repeated up to a total of 6 hours credit with departmental permission. Independent study/directed readings 1-3 hours. Prerequisites: ENGL 1213 and 6 hours foreign language study or permission of instructor.

LATIN (LATN)

Communication, English, and Foreign Languages

LATN 1113* BEGINNING LATIN I *3 credit hours* An introductory course in understanding, speaking, reading, and writing Latin. Lecture 3 hours. General Education, Humanities–Diversity. (Fall)

LATN 1223* BEGINNING LATIN II *3 credit hours* Continuation of LATN 1113. Lecture 3 hours. Prerequisite: LATN 1113 or equivalent. General Education, Humanities–Diversity. (Spring)

LATN 2113* INTERMEDIATE LATIN I *3 credit hours* An intermediate-level course in Latin. A review of grammar, writing, and speaking. Lecture 3 hours. Prerequisite: LATN 1223 or equivalent. (Fall)

LATN 2223* INTERMEDIATE LATIN II *3 credit hours* Continuation of LATN 2113. Lecture 3 hours. Prerequisite: LATN 2113 or equivalent. (Spring)

LATN 3113* ROMAN WRITERS I *3 credit hours* Beginning study of various authors of Roman literature.

Topics may include Roman prose, poetry, or drama. Lecture 3 hours. Prerequisite: LATN 2223 or equivalent.

LATN 3223* ROMAN WRITERS II *3 credit hours* A continuation of LATN 3113. Topics may include Roman prose, poetry, or drama. Lecture 3 hours. Prerequisite: LATN 3113 or equivalent.

LATN 4961-3* DIRECTED READINGS IN LATIN *1-3 credit hours* Intensive independent readings and research on a selected topic, writer, or movement in Latin literature or language under supervision of a faculty member. May be repeated to a total of 6 hours with departmental permission. Independent study/directed readings 1-3 hours. Prerequisite: LATN 3223 or equivalent.

LIBRARY SCIENCE (LIBS)

Education

LIBS 3423* CHILDREN'S LITERATURE *3 credit hours* 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. (Fall, Spring, Summer)

LINGUISTICS (LING)

Communication, English, and Foreign Languages

LING 4113* GENERAL LINGUISTICS *3 credit hours* A systematic review of linguistics to include grammar, phonology, morphology, syntax, and semantics of world languages. Lecture 3 hours. Prerequisites: Completion of primary and secondary language requirements or concurrent enrollment in final level. (Fall)

LING 4163 TEACHING ENGLISH AS A SECOND LANGUAGE: THEORY AND METHODS *3 credit hours* Introduction to theories of language acquisition and methods of instruction; practicum in applications of theories and methods. Lecture 3 hours. Prerequisites: 6 hours English Composition, 3 hours foreign language or instructor permission. (Fall)

LING 4173 TEACHING FOREIGN LANGUAGES: THEORY AND METHODS *3 credit hours* 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.

MANAGEMENT (MGMT)

Business

MGMT 3013* PRINCIPLES OF MANAGEMENT *3 credit hours* An introductory management course dealing with the fundamental principles of management: planning, organizing, and controlling. Lecture 3 hours. Prerequisite: BUS 1113. (Fall, Spring)

MGMT 3513 HUMAN RESOURCE MANAGEMENT *3 credit hours* 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.

MGMT 3613 OPERATIONS MANAGEMENT *3 credit hours* Management of operations in manufacturing and service systems. Includes product, process and job design; planning facilities, quality assurance, and control systems; improvement of processes; materials management; budgetary and cost control; and associated quantitative techniques. Lecture 3 hours. Prerequisites: MGMT 3013 and STAT 2613.

MGMT 3813 LABOR MANAGEMENT RELATIONS *3 credit hours* Study of the relationships between management and labor: contract negotiations, grievance procedures, and arbitration in the public and private sectors. Lecture 3 hours.

MGMT 4013 ORGANIZATIONAL BEHAVIOR *3 credit hours* 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 3013.

MGMT 4033 SMALL ENTERPRISE MANAGEMENT *3 credit hours* This course emphasizes principles and problems associated with starting and managing small enterprises. Lecture 3 hours. Prerequisite: MGMT 3013.

MGMT 4053 BUSINESS, ETHICS, AND SOCIETY *3 credit hours* An examination of the external environment of business, the need to ethically manage the external environment, and management's ethical responsibilities to the various elements of the environment. Lecture 3 hours. Prerequisite: BUS 1113. (Fall, Spring)

MGMT 4443 PROJECT MANAGEMENT *3 credit hours* Investigation and study of projects in organizations. Includes technical aspects pertaining to managing complex projects and systems. Emphasis placed on integrative concepts including topics such as project selection; planning and organization; negotiation and conflict resolution; budgeting and cost estimation; scheduling; resource allocation; monitoring and control; project auditing; and project termination. Lecture 3 hours. Prerequisite: MGMT 3013.

MGMT 4471-4 SEMINAR IN MANAGEMENT *1-4 credit hours* Group study of specified topics in management for undergraduate students. Can be repeated for a maximum of 9 hours credit under different topic titles. Seminar 1-4 hours. Prerequisites: 9 hours of upper division management and permission of the Chair.

MANAGEMENT INFORMATION SYSTEMS (MIS)

Computing and Mathematical Sciences

MIS 2001-3 SPECIAL PROBLEMS IN MANAGEMENT INFORMATION SYSTEMS *1-3 credit hours* Assigned student projects which will include topics not covered in

detail in the MIS curriculum and based on study needs. Lecture 1-3 hours.

MIS 2013 PROGRAMMING I *3 credit hours* Introduction to and use of application development tools for object-oriented programming. Emphasizes step-wise refinement of fourth generation computer languages (4GLs) and introduces CASE (Computer-Aided-Software 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: IT 1013.

MIS 2113 FUNDAMENTAL MIS TOOLS AND SKILLS *3 credit hours* A study of major microcomputer application software packages, including operating systems, word processing, and spreadsheet software. The emphasis is on hands-on use of these packages to develop software applications for solving basic business problems. Lecture 3 hours. (Fall, Spring)

MIS 3013 MANAGEMENT INFORMATION SYSTEMS *3 credit hours* An overview of the current principles and practices of information systems and solving problems from a managerial perspective. Lecture 3 hours. Prerequisites: IT 1013 or MIS 2113 or computer proficiency. (Fall, Spring)

MIS 3021-3 BUSINESS SOFTWARE APPLICATIONS *1-3 credit hours* A study of selected software for microcomputer systems. Course may be repeated for credit with different software packages. Lecture 1-3 hours. Prerequisite: MIS 2113.

MIS 3033 DATABASE DESIGN AND MANAGEMENT *3 credit hours* This course introduces the basic theories, skills, and techniques of data and database systems. The course will primarily focus on database design and implementation. Lecture 3 hours. Prerequisites: CS 1314/1314L or IT 1414/1414L or IT 2033 or MIS 2113. (Cross-listed with CS 3183.) (Fall)

MIS 3083 SYSTEMS ANALYSIS AND DESIGN *3 credit hours* 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: CIS 3083 or MIS 3033 or CS 3183.

MIS 3123 ADVANCED BUSINESS APPLICATIONS OF MICROCOMPUTER SOFTWARE *3 credit hours* 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.

MIS 3183 STRUCTURED QUERY LANGUAGE *3 credit hours* 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. Lecture 3 hours. Prerequisites: CS 1314/1314L or IT 1414/1414L.

MIS 3223 BUSINESS DATA COMMUNICATION/ TELECOMMUNICATIONS *3 credit hours* 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.

MIS 4023 DATA ANALYTICS *3 credit hours* The strategies and processes for Data Analytics of large databases. The major focus of this course is data analytics applications related to the corporate business world. Examples of discussion areas include banking and finance, retail, and heath care. Prerequisite: STAT 2013 or MIS 3033 or CS 3183.

MIS 4033 ELECTRONIC COMMERCE *3 credit hours* 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.

MIS 4433 PROJECT MANAGEMENT *3 credit hours* The course presents basic principles of project management, tools of project management, and the role of project manager in the successful completion of a project. Lecture 3 hours. Prerequisite: Junior standing.

MIS 4471-3 SEMINAR IN MANAGEMENT INFORMATION SYSTEMS *1-3 credit hours* Study of specified topics in Management Information Systems such as advanced telecommunications, advanced database, 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. Seminar 1-3 hours. Prerequisite: Permission of the Chair.

MIS 4491-3 INDEPENDENT STUDY IN MANAGEMENT INFORMATION SYSTEMS *1-3 credit hours* Independent reading and/or study of specific problems or special subjects, based upon pre-approved outlines of plans, with conferences and/or written reports. Independent study/directed readings 1-3 hours. Prerequisites: 9 upper division hours in the discipline of the independent study and department permission. A proposal must accompany the request when submitted for approval.

MIS 4533 APPLIED PROBLEMS IN MANAGEMENT INFORMATION SYSTEMS *3 credit hours* 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. Prerequisite: CIS 3083 or MIS 3033 or CS 3183.

MARKETING (MKTG)

Business

MKTG 3413* PRINCIPLES OF MARKETING *3 credit hours* An introductory 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: BUS 1113. (Fall, Spring)

MKTG 3423 CONSUMER MOTIVATION AND BEHAVIOR *3 credit hours* An examination of the internal and external influences on buyer behavior; analysis of the buying process; consumer decision-making; and aggregate consumer behavior over time. Lecture 3 hours. Prerequisite: MKTG 3413.

MKTG 3433 RETAILING *3 credit hours* An investigation of the retailing field examining retail strategy, merchandise management and store management. Lecture 3 hours. Prerequisite: MKTG 3413.

MKTG 3533 PERSONAL SELLING *3 credit hours* Students will earn how to become an effective sales professional through traditional and non-traditional approaches. Students will assess the current and potential value of an organization's offerings, develop skills in prospecting customers, craft unique selling propositions and design effective sales strategies to connect customers with needed satisfying products and services. Lecture 3 hours. Prerequisite: MKTG 3413.

MKTG 4433 ADVERTISING *3 credit hour*. A survey of the various advertising media with an emphasis on planning and evaluating advertising themes and campaigns. To this end, the various elements of advertising, the types of advertising, and the objectives of advertising will be examined. Lecture 3 hours. Prerequisite: MKTG 3413 or permission of the Chair.

MKTG 4443 MARKETING RESEARCH *3 credit hours* 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 3413 and STAT 2613.

MKTG 4481-3 SEMINAR IN MARKETING *1-3 credit hours* Study of specified topics in marketing. Can be repeated for a maximum of 9 hours credit under different topic titles. Seminar 1-3 hours. Prerequisites: MKTG 3413 and permission of the Chair.

MKTG 4553 SPORT MARKETING *3 credit hours* A study of the business side of sports, including economic impact, the use of sports as a marketing tool for other products, the marketing of sports products, sport sponsorships, publicity, media and guest relations. Lecture 3 hours. Prerequisites: MKTG 3413 or HPET 3023.

MKTG 4613 SERVICES MARKETING *3 credit hours* A study of the difference between expected and perceived service performance by investigating the listening gap, the service design and standards gap, the service performance gap and the communication gap. Lecture 3 hours. Prerequisite: MKTG 3413.

MATHEMATICS (MATH)

Computing and Mathematical Sciences

MATH 0013 PRE-ALGEBRA *Developmental course, no credit* This course provides a solid foundation in whole and signed number operations, fractions, decimals and percent. Does not satisfy any requirements for any degree program at Cameron University. Lecture 3 hours.

MATH 0103 BEGINNING ALGEBRA *Developmental course, no credit* 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. Lecture 3 hours. Prerequisite: MATH 0013 or satisfactory placement score.

MATH 0142 SUPPLEMENTAL SURVEY OF MATHEMATICS INSTRUCTION *Developmental course, no credit* Remediation and support for students who are enrolled in MATH 1413, but whose test scores and prior coursework do not indicate preparedness for college-level mathematics classes. Recommended for students enrolled in MATH 1413 who score less than 19 on the ACT Mathematics test and have not completed MATH 0213. Does not satisfy major requirements for any degree program at Cameron University. Lecture 2 hours. Prerequisite: MATH 0103 or satisfactory placement score. Corequisite: MATH 1413.

MATH 0152 SUPPLEMENTAL COLLEGE ALGEBRA INSTRUCTION *Developmental course, no credit* Remediation and support for students who are enrolled in MATH 1513, but whose test scores and prior coursework do not indicate preparedness for college-level mathematics classes. Recommended for students enrolled in MATH 1513 who score less than 19 on the ACT Mathematics test and have not completed MATH 0213. Does not satisfy major requirements for any degree program at Cameron University. Lecture 2 hours. Prerequisite: MATH 0103 or satisfactory placement score. Corequisite: MATH 1513.

MATH 0162 SUPPLEMENTAL FUNCTIONS AND MODELING INSTRUCTION *Developmental course, no*

credit Remediation and support for students who are enrolled in MATH 1463, but whose test scores and prior coursework do not indicate preparedness for college-level mathematics classes. Recommended for students enrolled in MATH 1463 who score less than 19 on the ACT Mathematics test and have not completed MATH 0213. Does not satisfy degree requirements for any degree program at Cameron University. Lecture 2 hours. Prerequisite: MATH 0103 or satisfactory placement score. Corequisite: MATH 1463.

MATH 0213 INTERMEDIATE ALGEBRA *Developmental course, no credit* 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. Lecture 3 hours. Prerequisite: MATH 0103 or satisfactory placement score.

MATH 1413* SURVEY OF MATHEMATICS *3 credit hours* An introductory course in Mathematics designed to acquaint the student with mathematical ideas and their applications. This course covers topics in mathematics to help the student develop quantitative reasoning skills and to better understand the world around them. Topics include (but are not limited to) finance, statistics, describing data, and linear programming. Does not apply toward a major or minor in mathematics. Lecture 3 hours. Prerequisite: MATH 0213 or MATH 0115 or satisfactory placement score. General Education, Mathematics. (Fall, Spring)

MATH 1463* FUNCTIONS AND MODELING *3 credit hours* Topics covered are equations and functions (linear, polynomial, rational, exponential, logarithmic) from various perspectives (symbolic, verbal, numerical, graphical); digital techniques for graphing functions, solving equations, and modeling data using regressions. This course is designed for students in agricultural, business, life/health science, or social science majors. Does not apply towards a minor or major in mathematics. Lecture 3 hours. Prerequisite: MATH 0213 or MATH 0115 or satisfactory placement score. General Education, Mathematics.

MATH 1513* COLLEGE ALGEBRA *3 credit hours* Topics covered include the study of equations and functions (polynomial, rational, radical, exponential, logarithmic) and systems of equations. Does not apply toward a minor or major in mathematics. Lecture 3 hours. Prerequisite: MATH 0213 or MATH 0115 or satisfactory placement score. General Education, Mathematics. (Fall, Spring)

MATH 1613* PLANE TRIGONOMETRY *3 credit hours* The development, use and relations between circular and trigonometric functions; solutions of triangles; and application to practical problems throughout the course. Does not apply towards a major or minor in mathematics. Lecture 3 hours. Prerequisite: MATH 1513 or satisfactory placement score. General Education, Mathematics.

MATH 2215* CALCULUS AND ANALYTIC GEOMETRY I *5 credit hours* Limits, derivatives with applications, the definite integral with applications. Lecture 5 hours. Prerequisites: MATH 1513 and 1613 or equivalent. General Education, Mathematics. (Fall, Spring)

MATH 2235* CALCULUS AND ANALYTIC GEOMETRY II *5 credit hours* Techniques of integration, applications of integration, polar coordinates, sequences and series, vectors. Lecture 5 hours. Prerequisite: MATH 2215. (Fall, Spring)

MATH 2244* CALCULUS AND ANALYTIC GEOMETRY III *4 credit hours* Solid analytic geometry, partial differentiation, multiple integrals, functions of several variables, vector calculus. Lecture 4 hours. Prerequisite: MATH 2235. (Fall)

MATH 2353 MATHEMATICS FOR ELEMENTARY TEACHERS I *3 credit hours* A basic course in mathematics for elementary education majors. An introduction to problem solving, numeration systems, whole number properties, and current technologies and manipulatives that relate to elementary mathematics. Additionally, operations with whole numbers are developed. Does not apply toward a major or minor in mathematics. Lecture 3 hours. Prerequisite: Completion of one math general education course. (Fall, Spring)

MATH 2363 MATHEMATICS FOR ELEMENTARY TEACHERS II *3 credit hours* An introduction to the structure of the real number system, functions, and probability and statistics for elementary education majors. Various manipulatives are used as teaching tools. Does not apply toward a major or minor in mathematics. Lecture 3 hours. Prerequisite: MATH 2353 or department permission. (Fall, Spring)

MATH 2491-3 SELECTED TOPICS IN MATHEMATICS *1-3 credit hours* 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 chair. Lecture 1-3 hours. Prerequisite: Permission of the department.

MATH 2613* FOUNDATIONS OF MATHEMATICS *3 credit hours* 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. (Fall)

MATH 2713* ELEMENTARY CALCULUS *3 credit hours* 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 or minor in mathematics. Lecture 3 hours. Prerequisite: MATH 1513 or equivalent. General Education, Mathematics.

MATH 3001 TECHNOLOGY FOR ADVANCED MATHEMATICS *1 credit hour* An introduction to software packages used in the practice and teaching of advanced mathematics. Topics will vary by semester. Course may be repeated for credit for different topics. Lecture 1 hour. Prerequisite: MATH 2215.

MATH 3003 TECHNOLOGY FOR ADVANCED MATHEMATICS *3 credit hours* An introduction to the use and application of popular mathematical software packages to problems from advanced mathematics, including calculus, linear algebra, and differential equations. Course also includes a basics introduction to computer programming within certain mathematical software packages. Software packages will include MATLAB® and Mathematica©. Lecture 3 hours. Prerequisites: MATH 3253 and either MATH 3013 or MATH 4433.

MATH 3013 INTRODUCTORY LINEAR ALGEBRA *3 credit hours* 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. (Fall, Odd Years)

MATH 3213* ABSTRACT ALGEBRA *3 credit hours* 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. Lecture 3 hours. Prerequisite: MATH 2613. (Spring, Even Years)

MATH 3253 DIFFERENTIAL EQUATIONS *3 credit hours* Ordinary differential equations with a brief introduction to solutions by series and Laplace transforms. Lecture 3 hours. Prerequisite: MATH 2235. (Spring)

MATH 3302* HISTORY OF MATHEMATICS *2 credit hours* The historical development of mathematics. Lecture 2 hours. Prerequisite: MATH 2215.

MATH 3333* COLLEGE GEOMETRY *3 credit hours* A comprehensive course which includes topics from both Euclidean and non-Euclidean geometries. Lecture 3 hours. Prerequisite: MATH 2215.

MATH 3343* NUMERICAL ANALYSIS *3 credit hours* An introduction to elementary numerical analysis. Topics include analysis of errors, approximation of solutions to equations and systems of equations, interpolation, approximation of functions, numerical differentiation and integration, and approximation of solutions to ordinary differential equations. Experience with computer programming is highly recommended, but not required. Lecture 3 hours. Prerequisites: MATH 3253 and either MATH 3013 or MATH 4433.

MATH 3373 ALGEBRA FOR TEACHERS *3 credit hours* A course in algebra specifically designed for teachers. Topics include integers, equations, functions, graphing, and applications of algebra. Does not apply towards a major or minor in mathematics. Lecture 3 hours. Prerequisite: EDUC 3003 and either MATH 2215 or MATH 2363.

MATH 3383 GEOMETRY FOR TEACHERS *3 credit hours* A course in geometry specifically designed for education majors. Topics include constructions and geometric proofs as well as the study of geometric objects in two and three dimensions. Does not apply towards a major in mathematics or minor in mathematics. Lecture 3 hours. Prerequisite: EDUC 3003 and either MATH 2215 or MATH 2363.

MATH 3413 DISCRETE MATHEMATICAL STRUCTURES *3 credit hours* An introduction to discrete mathematical structures. Topics include combinatorics, recursion, recurrence relations, generating functions, and graph theory. Lecture 3 hours. Prerequisites: MATH 2235 and MATH 2613.

MATH 4113 INTRODUCTION TO OPERATIONS RESEARCH *3 credit hours* An introductory treatment of some of the problems and techniques encountered in operations research. Topics include linear programming, network analysis, game theory, Markov chains, and analytical hierarchies. Lecture 3 hours. Prerequisite: MATH 2215 or 2713 or department permission.

MATH 4423* NUMBER THEORY *3 credit hours* Divisibility of integers, congruencies, quadratic residues, mathematical induction, distribution of primes, diophantine equations, numerical functions and continued fractions. Lecture 3 hours. Prerequisite: MATH 2613 or department permission.

MATH 4433 MATRIX ALGEBRA *3 credit hours* 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 department permission.

MATH 4471-3 SEMINAR IN MATHEMATICS *1-3 credit hours* Group projects designed to meet special needs. May be repeated as often as desired with permission of the department chair. Seminar 1-3 hours. Prerequisite: Departmental approval. Will count on major or minor only with department permission.

MATH 4483 INTRODUCTION TO REAL ANALYSIS *3 credit hours* A study of the basic concepts of analysis, elementary set theory, the real numbers, sequences and series, functions of real variables, derivatives, and integrals. Lecture 3 hours. Prerequisites: MATH 2235 and 2613. (Spring, Odd Years)

MATH 4491-3 INDEPENDENT STUDY IN MATHEMATICS *1-3 credit hours* 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 chair. Independent study/directed readings 1-3 hours. Prerequisite: Department permission.

MATH 4773 TEACHING OF SECONDARY MATHEMATICS *3 credit hours* Various aspects of the pedagogy of teaching secondary mathematics courses will be explored. Lecture 3 hours. Prerequisite: Juniors or

seniors who have been admitted to Teacher Education; MATH 2613, and one of MATH 3302, MATH 3333, MATH 3413, or MATH 4423.

MATH 4782 MATHEMATICS CAPSTONE I *2 credit hours* This course serves to integrate the mathematics curriculum through a comprehensive survey of significant theorems within the field covering a wide spectrum of topics. Students will also begin working on a project to be submitted and presented in MATH 4792. Capstone/lecture 2 hours. Prerequisite: Departmental permission. (Fall)

MATH 4792 MATHEMATICS CAPSTONE II *2 credit hours* This course serves to further the professional development of the student, including topics on careers and graduate school. Students will also submit and present their project started in MATH 4782. Program assessment is also a component. Capstone/lecture 2 hours. Prerequisite: MATH 4782. (Spring)

MEDICAL LABORATORY SCIENCE (MLS)

Agriculture, Biology, and Health Sciences

MLS 4117 CLINICAL MICROBIOLOGY *7 credit hours* The theory and laboratory study of pathogenic bacteria, viruses, rickettsiae, fungi and parasites. Includes isolation, identification, antimicrobial susceptibility testing, and medical significance. Department permission required. Lecture/laboratory 7 hours. Will not satisfy general education science requirements.

MLS 4125 CLINICAL CHEMISTRY *5 credit hours* The theory and laboratory methodology of analytical biochemistry, clinical microscopy, routine and special procedures and medical significance. Department permission required. Lecture/laboratory 5 hours. Will not satisfy general education science requirements.

MLS 4236 CLINICAL HEMATOLOGY *6 credit hours* 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. Department permission required. Lecture/ laboratory 6 hours. Will not satisfy general education science requirements.

MLS 4246 CLINICAL IMMUNOLOGY *6 credit hours* 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. Department permission required. Lecture/laboratory 6 hours. Will not satisfy general education science requirements.

MLS 4325 CLINICAL CHEMISTRY II *5 credit hours* The theory and laboratory methodology of analytical biochemistry, instrumentation, and lab mathematics, routine and special procedures and medical significance. Department permission required. Lecture/laboratory 5 hours. Will not satisfy general education science requirements.

MLS 4351 TOPICS IN MEDICAL LAB SCIENCE *1 credit hour* Principles and practices of the medical laboratory including basic management, special education methodology, and special projects in selected areas. Department permission required. Lecture/laboratory 1 hour. Will not satisfy general education science requirements.

MILITARY SCIENCE AND LEADERSHIP (MSL)

Military Science

MSL 1011 FOUNDATIONS OF OFFICERSHIP LAB *1 credit hour* 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 allows 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. Laboratory 1 hour. Prerequisite: Foundations of Officership (MSL 1012) or concurrent enrollment. MSL 1012 must be successfully completed before credit is given in this course.

MSL 1012 FOUNDATIONS OF OFFICERSHIP *2 credit hours* 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. Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets. Lecture 2 hours.

MSL 1021 BASIC LEADERSHIP LAB *1 credit hour* 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 allows 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. Laboratory 1 hour. Prerequisite: Basic Leadership (MSL 1022) or concurrent enrollment. MSL 1022 must be successfully completed before credit is given in this course.

MSL 1022 BASIC LEADERSHIP *2 credit hours* 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. Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets. Lecture 2 hours.

MSL 1110 PHYSICAL FITNESS *0 credit hours* Explore components of a fitness plan through practical experience and instruction with emphasis on aerobic and anaerobic fitness, muscular strength and endurance, flexibility, and nutrition. The course is modelled around the Army Physical Readiness Training (PRT) Program. For participating students who are not in the ROTC program, the Army PRT Program offers a different approach to fitness and fitness assessment. Will not satisfy General Education, Health and Wellness. May be repeated up to 7 times. Laboratory 0 hours.

MSL 1112 PHYSICAL FITNESS *2 credit hours* Explore components of a fitness plan through practical experience and instruction with emphasis on aerobic and anaerobic fitness, muscular strength and endurance, flexibility, and nutrition. The course is modelled around the Army Physical Readiness Training (PRT) Program. For participating students who are not in the ROTC program, the Army PRT Program offers a different approach to fitness and fitness assessment. May be repeated for a maximum of 4 hours credit. Laboratory 4 hours. General Education, Health and Wellness.

MSL 1212 RANGER CHALLENGE *2 credit hours* A Ranger Challenge Team is made up of nine people competing in various physically and mentally challenging events including rifle disassembly/assembly, an Army Physical Fitness Test, land navigation (written and actual), grenade assault course, basic rifle marksmanship, obstacle course, one-rope bridge, radio assembly, and a ten-kilometer road march. Each year, Ranger Challenge teams across the country compete against each other in this two day competition. Lecture with Activity 2 hours. Prerequisite: Department permission.

MSL 2002-8 LEADER'S TRAINING COURSE (BASIC CAMP) *2-8 credit hours* 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.

MSL 2011 INDIVIDUAL LEADERSHIP LAB *1 credit hour* 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 allows 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. Laboratory 1 hour. Prerequisite: Individual Leadership Studies (MSL 2012) or concurrent enrollment. MSL 2012 must be successfully completed before credit is given in this course.

MSL 2012 INDIVIDUAL LEADERSHIP STUDIES *2 credit hours* 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. Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); Mandatory for "Contracted" cadets. Lecture 2 hours.

MSL 2021 LEADERSHIP AND TEAMWORK LAB *1 credit hour* 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 allows 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. Laboratory 1 hour. Prerequisite: Leadership and Teamwork (MSL 2022) or concurrent enrollment. MSL 2022 must be successfully completed before credit is given in this course.

MSL 2022 LEADERSHIP AND TEAMWORK *2 credit hours* 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. Participation in Leadership Lab and Physical Fitness training is optional for "Non-Contracted" cadets (but highly encouraged); mandatory for "Contracted" cadets. Lecture 2 hours.

MSL 2032 INDEPENDENT STUDY IN MILITARY SCIENCE *2 credit hours* 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.

MSL 3011 LEADERSHIP AND PROBLEM SOLVING LAB *1 credit hour* 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 allows 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. Laboratory 1 hour. Prerequisite: MSL 3013 or concurrent enrollment. MSL 3013 must be successfully completed before credit is given in this course.

MSL 3013 LEADERSHIP AND PROBLEM SOLVING *3 credit hours* 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. Prerequisite: Completion of Military Science Basic Courses or placement credit for the Basic Courses and permission of the Professor of Military Science.

MSL 3021 LEADERSHIP AND ETHICS LAB *1 credit hour* 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 allows students to get out of the classroom and apply the skills they have learned in fast-paced exercises. Mandatory attendance for Juniors and Seniors. Laboratory 1 hour. Prerequisite: Leadership and Ethics (MSL 3023) or concurrent enrollment. MSL 3023 must be successfully completed before credit is given in this course.

MSL 3023 LEADERSHIP AND ETHICS *3 credit hours* 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. Prerequisite: Completion of Military Science Basic Courses or placement credit for the Basic Courses and permission of the Professor of Military Science.

MSL 4004 CADET LEADER COURSE *4 credit hours* A four-week leadership development exercise conducted at Fort Knox, Kentucky. Open only to (and required of) students who have completed MSL 3013 and 3023. The Cadet Leader Course environment is highly structured and demanding; stressing leadership at small unit levels under varying, challenging conditions. Individual leadership and basic skills performance are continuously developed throughout the exercise. Qualified cadets may be assigned in leadership positions supporting the Cadet Initial Entry Training (CIET) exercise, either before or after their scheduled CLC. They may also attend Airborne, Air Assault, Northern Warfare and Cadet Troop Leader Training between the end of the spring semester and the beginning of the fall semester. Prerequisites: MSL 3013 and 3023.

MSL 4011 LEADERSHIP CHALLENGES/GOAL SETTING LAB *1 credit hour* 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 allows students to get out of the classroom and apply the skills they have learned in fast-paced exercises. Mandatory attendance for Juniors and Seniors. Laboratory 1 hour. Prerequisite: Leadership Challenges/Goal Setting (MSL 4013) or concurrent enrollment. MSL 4013 must be successfully completed before credit is given in this course.

MSL 4013 LEADERSHIP CHALLENGES AND GOAL SETTING *3 credit hours* 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. Prerequisite: Permission of the Professor of Military Science.

MSL 4021 OFFICERSHIP LAB *1 credit hour* 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 allows 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. Laboratory 1 hour. Prerequisite: Officership (MSL 4023) or concurrent enrollment. MSL 4023 must be successfully completed before credit is given in this course.

MSL 4023 OFFICERSHIP *3 credit hours* 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. Prerequisite: Permission of the Professor of Military Science.

MSL 4031 INTERNSHIP/LAB IN MILITARY SCIENCE *1 credit hour* Placement of advanced military science students in applied job settings conducting company level duties alongside a serving platoon leader or staff officer within the student's desired Army branch and/or students will be in a weekly leadership laboratory emphasizing advanced practical application of leadership and military skills. Internship/lab, 1 hour. May be

repeated for a maximum of 3 hours credit. Prerequisites: Concurrent enrollment in MSL 4032, completion of military science advanced labs and permission of the Professor of Military Science.

MSL 4032 SEMINAR IN MILITARY SCIENCE *2 credit hours* Students will learn various theories of leadership and organizational culture while developing practical experience in the application of those theories within a peer leadership setting. Additionally, the course will include elements of military history, social theory, and ethics. Seminar, 2 hours. May be repeated for a maximum of 6 hours credit. Prerequisites: Concurrent enrollment in MSL 4031, completion of military science advanced courses, and permission of the Professor of Military Science.

MUSIC (MUSC)

Art, Music, and Theatre Arts

MUSC 1000 CONCERT AND RECITAL ATTENDANCE *0 credit hours* 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. Concert/recital 0 hours. (Fall, Spring)

MUSC 1013* AMERICAN POPULAR MUSIC *3 credit hours* 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. General Education, Humanities–Aesthetics.

MUSC 1023* MUSIC APPRECIATION *3 credit hours* 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. General Education, Humanities–Aesthetics.

MUSC 1033* WORLD MUSIC IN CULTURE *3 credit hours* The study of the music of the world in their cultural contexts. An exploration of the relationships between music and identity, everyday life, worship and belief, dance, memory, migration, and/or politics. The music of Asia, Polynesia, The Middle East, Sub-Saharan Africa, the Caribbean, South America, Mexico, and Native America are studied. Lecture 3 hours. General Education, Humanities–Aesthetics and Humanities–Diversity.

MUSC 1110-1 CONCERT BAND *0-1 credit hour* 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. (Fall, Spring)

MUSC 1120-1 ORCHESTRA *0-1 credit hour* 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. (Fall, Spring)

MUSC 1130-1 JAZZ ENSEMBLE *0-1 credit hour* 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.

MUSC 1140-1 CONCERT CHOIR *0-1 credit hour* 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. (Fall, Spring)

MUSC 1150-1 GUITAR ENSEMBLE *0-1 credit hour* 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. (Fall, Spring)

MUSC 1201 CLASS LESSONS *1 credit hour* Class instruction in an orchestral instrument, keyboard, voice or guitar. Laboratory 2 hours. Requires 5 hours practice per week. May be repeated for credit. (Fall, Spring)

MUSC 1210-1 COMMUNITY BAND *0-1 credit hour* Performance ensemble open to all Cameron students, faculty, staff, and community members in a format convenient for working members of the community. Rehearsal 2-3 hours per week. May be repeated for credit or non-credit.

MUSC 1230-1 COMMUNITY JAZZ ENSEMBLE *0-1 credit hour* Performance ensemble open to all Cameron students, faculty, staff, and community members in a format convenient for working members of the community. Rehearsal 2-3 hours per week. May be repeated for credit or non-credit.

MUSC 1413* MUSIC LITERATURE *3 credit hours*An overview of the development of western musical styles from antiquity to the present. Requires the ability to read music. Lecture 3 hours. General Education, Humanities-Aesthetics.

MUSC 2201-2 PRIVATE LESSONS *1-2 credit hours* 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. Private lessons 1-2 hours. Prerequisite: Department permission. (Fall, Spring)

MUSC 2301* MUSIC FUNDAMENTALS *1 credit hour* An introduction to the basic signs and symbols and the theory of music. Lecture 1 hour, laboratory 1 hour.

MUSC 2312* HARMONY AND STRUCTURE I *2 credit hours* The study of the harmony and structure of music through music analysis, composition and the development of associated functional keyboard skills. Lecture 2 hours. Recommended for music majors only. (Fall)

MUSC 2321* SIGHT-SINGING AND EAR TRAINING I *1 credit hour* The study and development of sight singing and ear training skills through the mastery of written, visual, singing and aural techniques. Laboratory 2 hours. Concurrent enrollment with MUSC 2312 recommended. (Fall)

MUSC 2332* HARMONY AND STRUCTURE II *2 credit hours* A continuation of MUSC 2312. Lecture 2 hours. Prerequisite: MUSC 2312. (Spring)

MUSC 2341* SIGHT-SINGING AND EAR TRAINING II *1 credit hour* A continuation of MUSC 2321. Laboratory 2 hours. Prerequisite: MUSC 2321. Concurrent enrollment with MUSC 2332 recommended. (Spring)

MUSC 3160–1 SMALL ENSEMBLE *0-1 credit hour* 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.

MUSC 3171 ACCOMPANYING *1 credit hour* Piano performance experience through accompanying soloists, small and large ensembles and musical/opera productions. Rehearsal 2-4 hours plus practice each week. Prerequisite: Department permission. May be repeated for credit. (Fall, Spring)

MUSC 3312* HARMONY AND STRUCTURE III *2 credit hours* A continuation of MUSC 2332. Lecture 2 hours. Prerequisite: MUSC 2332. (Fall)

MUSC 3321* SIGHT-SINGING AND EAR TRAINING III *1 credit hour* A continuation of MUSC 2341. Laboratory 2 hours. Prerequisite: MUSC 2341. Concurrent enrollment with MUSC 3313 recommended. (Fall)

MUSC 3332* HARMONY AND STRUCTURE IV *2 credit hours* A continuation of MUSC 3312, the study of the harmony and structure of music through music analysis, composition, and the development of associated functional keyboard skills. Included will be a study of the standard polyphonic and homophonic forms of the 18th and 19th centuries. Lecture 3 hours. Prerequisite: MUSC 3312. (Spring)

MUSC 3341* SIGHT-SINGING AND EAR TRAINING IV *1 credit hour* A continuation of MUSC 3321. Laboratory 2 hours. Prerequisite: MUSC 3321. Concurrent enrollment with MUSC 3333 recommended. (Spring)

MUSC 3351-3 COMPOSITION *1-3 credit hours* An exploration of various compositional styles and techniques. One half-hour lesson per week per credit hour enrolled. Prerequisite: MUSC 2312.

MUSC 3513* MUSIC HISTORY I: ANTIQUE-RENAISSANCE *3 credit hours* A general study of music development from antiquity through the Renaissance era. Lecture 3 hours. (Fall)

MUSC 3523* MUSIC HISTORY II: BAROQUE-CLASSICAL *3 credit hours* A continuation of MUSC 3513. A study of music development from the Baroque to the Classical era. Lecture 3 hours. Prerequisite: MUSC 3513. (Spring)

MUSC 3533* MUSIC HISTORY III: ROMANTIC-CONTEMPORARY *3 credit hours* A continuation of MUSC 3523. A study of music development from the Romantic to the Present. Lecture 3 hours. (Fall)

MUSC 3612* FUNDAMENTALS OF CONDUCTING *2 credit hours* A beginning course in the principles of both choral and instrumental conducting. Lecture 1 hour, laboratory 1 hour. Prerequisite: Recommended for music majors only. (Fall, Odd Years)

MUSC 3622 ADVANCED CONDUCTING *2 credit hours* The techniques of reading scores, use of the baton and interpretation. Practical experience in conducting. Lecture 1 hour, laboratory 1 hour. Prerequisite: MUSC 3612. (Spring, Even Years)

MUSC 3642 WOODWIND METHODS *2 credit hours* 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, laboratory 1 hour. Prerequisite: Instructor permission.

MUSC 3652 BRASS METHODS *2 credit hours* 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, laboratory 1 hour. Prerequisite: Instructor permission.

MUSC 3662 STRING METHODS *2 credit hours* 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, laboratory 1 hour. Prerequisite: Instructor permission.

MUSC 3672 PERCUSSION METHODS *2 credit hours* 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, laboratory 1 hour. Prerequisite: Instructor permission.

MUSC 3761* ENGLISH AND ITALIAN DICTION *1 credit hour* An introduction to diction in English and Italian based on the song literature and using the International Phonetic Alphabet (IPA) through singing, oral, and written drill. Laboratory 2 hours.

MUSC 3771* FRENCH AND GERMAN DICTION *1 credit hour* An introduction to diction in French and German based on the song literature and using the International Phonetic Alphabet (IPA) through singing, oral, and written drill. Laboratory 2 hours.

MUSC 3801-4 PRIVATE LESSONS *1-4 credit hours* 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. Private lessons 1-4 hours. Prerequisite: Departmental permission. Open to music majors and minors only. (Fall, Spring)

MUSC 3812 INSTRUMENTAL METHODS FOR VOCAL AND KEYBOARD EDUCATION *2 credit hours* 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, laboratory 2 hours.

MUSC 3981-2 SEMINAR *1-2 credit hours* 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. Seminar 1-2 hours. Prerequisite: Departmental permission.

MUSC 3983 SPECIAL TOPICS IN THE ADVANCED STUDY OF MUSIC *3 credit hours* 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. Seminar 3 hours. Prerequisite: Departmental permission.

MUSC 3990 JUNIOR RECITAL *0 credit hours* A pre-senior performance in the student's major area of study, normally one half-hour in length. Performance 0 hours. Prerequisite: Permission of the Chair. (Fall, Spring)

MUSC 4312* COUNTERPOINT *2 credit hours* A study of Eighteenth-Century species counterpoint through analysis and composition. Lecture 2 hours. Prerequisite: MUSC 3333.

MUSC 4322* POST TONAL TECHNIQUES *2 credit hours* A study of 20th Century harmonic and melodic techniques approached through original composition, analysis and performance. Lecture 2 hours. Prerequisite: MUSC 3333. (Spring, Odd Years)

MUSC 4332* FORM AND ANALYSIS *2 credit hours* A study of the standard polyphonic and homophonic forms of the 18th and 19th centuries. Lecture 2 hours. Prerequisite: MUSC 3333. (Fall, Odd Years)

MUSC 4342* ARRANGING *2 credit hours* The study of the art of arranging for instrumental and vocal ensembles. Lecture 2 hours. Prerequisite: MUSC 3332. (Fall, Even Years)

MUSC 4351-3 COMPOSITION *1-3 credit hours* An exploration of various compositional styles and techniques. One half-hour lesson per week per credit hour enrolled. Lecture 1-3 hours. Prerequisite: Junior standing in composition. May be repeated for credit. Open to music composition majors only.

MUSC 4362 COMPUTER MUSIC *2 credit hours* 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, laboratory 2 hours. Prerequisite: Department permission.

MUSC 4712 ELEMENTARY METHODS *2 credit hours* 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.

MUSC 4722 SECONDARY INSTRUMENTAL METHODS *2 credit hours* 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.

MUSC 4732 SECONDARY VOCAL METHODS *2 credit hours* 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.

MUSC 4733* KEYBOARD LITERATURE *3 credit hours* Survey of keyboard literature. Lecture 3 hours.

MUSC 4743 KEYBOARD PEDAGOGY *3 credit hours* The study of teaching techniques and materials for class and private instruction. Lecture 3 hours. Prerequisite: department permission.

MUSC 4753 VOCAL PEDAGOGY *3 credit hours* The study of vocal training techniques including anatomy of vocal tract, physiological process and acoustical properties, methods and materials. Lecture 3 hours. Prerequisite: Department permission.

MUSC 4801-4 PRIVATE LESSONS *1-4 credit hours* 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. Private lessons 1-4 hours. Prerequisite: Junior standing. Open to music majors only. (Fall, Spring)

MUSC 4900 SENIOR MUSIC CAPSTONE *0 credit hours* A composite synthesis of focused topics including the music department's internal music examination, the Educational Testing Service online exit examination for music, the Collegiate Assessment of Academic Proficiency (university writing and critical thinking exit examination), and the strengthening of the individual student portfolio for potential career advancement and/or entry into graduate studies. Required of all music degrees (B.A., B.M., and B.M.E.) Capstone/lecture 0 hours. Prerequisite: Permission of the Chair after completion of Music Theory and Music History Sequence. (Fall, Spring)

MUSC 4910-4 WORKSHOP *0-4 credit hours* A concentrated specific activity utilizing lectures and practical application exercises. May be repeated for credit to a maximum of 8 hours credit. Lecture 0-4 hours.

MUSC 4981-3 INDEPENDENT STUDY *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: Department permission. The total number of hours earned in independent study may not exceed four.

MUSC 4990 SENIOR RECITAL *0 credit hours* Culminating performance in the student's major area of study.

Normally one hour in length. Performance 0 hours. Prerequisite: Permission of the Chair. (Fall, Spring)

ORGANIZATIONAL LEADERSHIP (ORGL)

Business

ORGL 2102 FOUNDATIONS OF LEADERSHIP *2 credit hours* A course designed to familiarize students with the theoretical and practical underpinnings of transformative leadership within the public and private sectors. Knowledge, skills, and foundation in leadership necessary to be an effective leader in a variety of settings is provided. Restricted to 2nd year PLUS students. Lecture 2 hours. Prerequisite: Permission of PLUS advisor.

ORGL 2221-3 SPECIAL STUDIES *1-3 credit hours* A study of special organizational leadership areas or problems. Areas of study will vary from semester to semester. A student could count a max of 6 hours. Lecture 1-3 hours.

ORGL 3113 FOUNDATIONS OF ORGANIZATIONAL LEADERSHIP AND PERSONAL DEVELOPMENT *3 credit hours* 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 and leadership; resources for success in an online learning environment; resources for conducting online library research; and leadership topics including leadership traits and styles. Students will complete a variety of assignments including a research paper in APA format. Lecture 3 hours. (Fall)

ORGL 3223* PROFESSIONAL COMMUNICATIONS* *3 credit hours* 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 methods, and leading teams. Lecture 3 hours. (Spring)

ORGL 3333 DATA ANALYSIS AND INTERPRETATION *3 credit hours* 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. Lecture 3 hours. (Fall)

ORGL 3443* SURVEY OF FISCAL MANAGEMENT *3 credit hours* 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. Lecture 3 hours. (Spring)

ORGL 3621-3 SEMINAR IN ORGANIZATIONAL LEADERSHIP *1-3 credit hours* A study of special organizational leadership project, areas, or problems. Areas of study will vary from semester to semester. A student could count a max of 6 hours. Lecture 1-3 hours.

ORGL 4113 ETHICS AND ORGANIZATIONS *3 credit hours* 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. Lecture 3 hours. (Fall)

ORGL 4213 ORGANIZATIONAL CULTURE AND LEADERSHIP *3 credit hours* The broad purpose of this course is to examine how organizational cultures operate so that the decisions and actions taken by leaders can have greater positive, intentional impact. This course is designed to help leaders become aware of the multiple dimensions of culture and develop the skills of interpretation necessary to understand organizations. Lecture 3 hours. (Spring)

ORGL 4223 THE INDIVIDUAL, THE ORGANIZATION, AND SOCIETY *3 credit hours* 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. Lecture 3 hours. (Fall)

ORGL 4313 GLOBAL LEADERSHIP AND DIVERSITY *3 credit hours* This course provides an in-depth introduction to global leadership and its development and to fostering innovation and global change. The class will prepare students to engage across differences effectively in a cross-cultural workplace and improve their ability to work within and lead diverse teams and organizations. Lecture 3 hours. (Fall)

ORGL 4333 LEADERSHIP THEORY AND PRACTICE *3 credit hours* 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. Lecture 3 hours. (Spring)

ORGL 4443 MARKETS AND STAKEHOLDERS *3 credit hours* 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. Lecture 3 hours. (Fall)

ORGL 4553 CAPSTONE *3 credit hours* 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. Capstone/lecture 3 hours. (Spring)

ORGL 4993 INTERNSHIP IN ORGANIZATIONAL LEADERSHIP *3 credit hours* Supervised professional-level assignment with an organization, firm, government agency, or not-for-profit entity within the selected area of focus. Internship 3 hours. Prerequisites: All core courses except for ORGL 4553, Capstone. Permission of instructor.

PASHTO (PHTO)

Communication, English, and Foreign Languages

PHTO 4153* INTENSIVE STUDIES IN PASHTO I *3 credit hours* An intensive introductory study of Pashto combining guided independent study of the written language with regular oral practice of the spoken language. Two hours independent study, one-hour lab. Prerequisite: ENGL 1213 and six-hours study of another foreign language or permission of the department.

PHTO 4163* INTENSIVE STUDIES IN PASHTO II *3 credit hours* Continuation of PHTO 4153. Two hours independent study, one-hour lab. Prerequisite: PHTO 4153.

PERSIAN (FARSI) (PRSN)

Communication, English, and Foreign Languages

PRSN 1113* BEGINNING PERSIAN (FARSI) I *3 credit hours* An introductory course in the language and cultures of Iran and Afghanistan. Lecture 3 hours. General Education, Humanities–Diversity.

PRSN 1223* BEGINNING PERSIAN (FARSI) II *3 credit hours* Continuation of PRSN 1113. Lecture 3 hours. Prerequisite: PRSN 1113 or equivalent. General Education, Humanities–Diversity.

PHILOSOPHY (PHIL)

Social Sciences

PHIL 1113* INTRODUCTION TO PHILOSOPHY *3 credit hours* This class aims to introduce students to philosophy as an academic discipline and as a distinctive intellectual and moral attitude towards the world and oneself, one marked by the belief that the use of reason in the search for truth is the most important human activity. We will consider questions such as the relation between philosophy and society, the existence of God, the character of and grounds for human knowledge, and the nature and status of morality. Throughout we will concentrate on close readings of the texts under discussion. Representative readings: Plato, Aquinas, Descartes, Nietzsche. Lecture 3 hours. General Education, Humanities–Diversity.

PHIL 2713* INTRODUCTION TO WORLD RELIGIONS *3 credit hours* One of the most widespread forms of human thought and behavior is religious belief and practice. This course will survey the history, practices, and beliefs of several religions, giving most attention to those enjoying current and widespread practice. Religions covered will include Hinduism, Buddhism, Judaism, Christianity, and Islam, plus others. The approach will be historical, with some use of other disciplines such as sociology, philosophy, and anthropology. Some attention will also be given to various definitions of religion, and various explanations for religious practice. The perspective used will be non-sectarian, with no particular religion, nor secularism, given priority of place. Lecture 3 hours.

PHYSICAL EDUCATION ACTIVITY (PE)

Sports and Exercise Science

PE 1021 TEAM SPORTS–COED *1 credit hour* Refine team sport skills through drill instruction and class participation. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1081 PHYSICAL EDUCATION ACTIVITY *1 credit hour* Individual and group activities for general physical improvement. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1091 TOTAL FITNESS *1 credit hour* Low impact exercise that combines strength and cardiovascular conditioning that lead to improved exercise outcomes. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1111 WATER EXERCISE *1 credit hour* To improve overall cardiovascular fitness level through aquatic based exercise modalities. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1171 VOLLEYBALL *1 credit hour* Fundamentals and techniques of volleyball. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1181 RACQUET SPORTS *1 credit hour* Basic skills and knowledge associated with playing a variety of racquet sports. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1231 WALKING AND JOGGING I *1 credit hour* Participation in introductory exercise programs that involve walking and jogging to promote physical fitness. A medical release is required for students who may need

exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1241 WALKING AND JOGGING II *1 credit hour* Participate in intermediate exercise programs that involve walking and jogging to help maintain physical fitness. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1271 WEIGHT TRAINING *1 credit hour* Participate in an exercise program with emphasis on muscular strength and endurance. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1361 SPIN *1 credit hour* Low to moderate intensity workout for building strength. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1441 WEIGHT LOSS YOGA *1 credit hour* Discuss current eating trends and perform breathing exercises, yoga poses and meditation techniques that support weight loss. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1531 LINE DANCING *1 credit hour* Introduction to line dancing using fundamental skills to execute rhythmic dances in social settings to include exposure to several genres of music, dance terminology, and a brief history of dance. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PE 1601 INTRODUCTION TO HIKING *1 credit hour* Review safety guidelines and develop basic skills for exploring popular hiking trails. A medical release is required for students who may need exercise accommodations due to a medical condition. Laboratory 2 hours. General Education, Health and Wellness.

PHYSICAL SCIENCE (PSCI)

Chemistry, Physics, and Engineering

PSCI 1054* GENERAL PHYSICAL SCIENCE *4 credit hours* 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 4 hours. General Education, Physical Science.

PHYSICS (PHYS)

Chemistry, Physics, and Engineering

PHYS 1115* PHYSICS I *5 credit hours* 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 2215. Corequisite: PHYS 1115L. General Education Laboratory Science, Physical Science. (Fall)

PHYS 1115L* PHYSICS I LAB *0 credit hours* LAB: 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 2215. Corequisite: PHYS 1115. General Education Laboratory Science, Physical Science. (Fall)

PHYS 1215* PHYSICS II *5 credit hours* 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. Corequisite: PHYS 1215L. Will not satisfy general education science requirements. (Spring)

PHYS 1215L* PHYSICS II LAB *0 credit hours* LAB: 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. Corequisite: PHYS 1215. Will not satisfy general education science requirements. (Spring)

PHYS 2015* PHYSICS I FOR SCIENCE AND ENGINEERING MAJORS *5 credit hours* A lecture-laboratory course of general physics taught with calculus. Includes topics from mechanics, heat and sound. Lecture 4 hours, laboratory 2 hours. Prerequisite: MATH 2215 or concurrent enrollment. Corequisite: PHYS 2015L. General Education Laboratory Science, Physical Science. (Spring)

PHYS 2015L* PHYSICS I FOR SCIENCE AND ENGINEERING MAJORS LAB *0 credit hours* LAB: A lecture-laboratory course of general physics taught with calculus. Includes topics from mechanics, heat and sound. Lecture 4 hours, laboratory 2 hours. Prerequisite: MATH 2215 or concurrent enrollment. Corequisite: PHYS 2015. General Education Laboratory Science, Physical Science. (Spring)

Physics courses at the 2000-, 3000-, or 4000-level **may not** be used to fulfill General Education science requirements (except PHYS 2015/2015L.

PHYS 2025* PHYSICS II FOR SCIENCE AND ENGINEERING MAJORS *5 credit hours* A continuation of PHYS 2015. Includes topics from electricity, light, and modern physics. Lecture 4 hours, laboratory 2 hours. Prerequisite: PHYS 2015. Corequisite: PHYS 2025L. Will not satisfy general education science requirements. (Fall)

PHYS 2025L* PHYSICS II FOR SCIENCE AND ENGINEERING MAJORS LAB *0 credit hours* LAB: A continuation of PHYS 2015. Includes topics from

electricity, light, and modern physics. Lecture 4 hours, laboratory 2 hours. Prerequisite: PHYS 2015. Corequisite: PHYS 2025. Will not satisfy general education science requirements. (Fall)

PHYS 2541* INTRODUCTION TO PHYSICS LITERATURE *1 credit hour* This course is designed for students to distinguish between different types of literature sources, accomplish literature searches, prepare poster presentations, and write technical papers. Lecture 1 hour. Prerequisite: PHYS 1215 or PHYS 2025. Will not satisfy general education science requirements. (Fall, Even Years)

PHYS 3003* MODERN PHYSICS *3 credit hours* 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. Lecture 3 hours. Prerequisites: MATH 2215 or concurrent enrollment and PHYS 1215 or PHYS 2025. Will not satisfy general education science requirements. (Spring)

PHYS 3011* MODERN PHYSICS LABORATORY *1 credit hour* 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. Will not satisfy general education science requirements. (Spring)

PHYS 3024 ELECTRICAL MEASUREMENTS AND ELECTRONICS *4 credit hours* Principles and application of dc and ac circuits analysis, measuring instruments, operational amplifiers, and various solid-state devices. The physics of solid-state electronic devices and their applications. Lecture 4 hours. Prerequisites: PHYS 1215 or PHYS 2025 and MATH 2215. Will not satisfy general education science requirements.

PHYS 3031 ELECTRICAL MEASUREMENTS AND ELECTRONICS LABORATORY *1 credit hour* 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. Will not satisfy general education science requirements.

PHYS 3043 INTRODUCTION TO QUANTUM MECHANICS *3 credit hours* An introduction to quantum mechanics. Schrodinger equation, probabilities, Heisenberg uncertainty principle, and angular momentum. Applications to atomic physics, molecular physics, condensed matter and nuclear physics. Lecture 3 hours. Prerequisites: PHYS 1215 or 2025 and MATH 3253 or concurrent enrollment. Will not satisfy general education science requirements. (Spring, Even Years)

PHYS 3303* CLASSICAL MECHANICS *3 credit hours* A vector analytical approach to the mechanics of particles, systems of particles, and rigid bodies. Lecture 3 hours. Prerequisite: PHYS 1115 or PHYS 2015 and MATH 3253. Will not satisfy general education science requirements. (Fall, Even Years)

PHYS 3403* THERMAL PHYSICS *3 credit hours* 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. Lecture 3 hours. Prerequisites: MATH 2235 and PHYS 1215 or PHYS 2025. Will not satisfy general education science requirements. (Fall, Odd Years)

PHYS 4113* ELECTRICITY AND MAGNETISM *3 credit hours* 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: PHYS 1215 or PHYS 2025 and MATH 2244. Will not satisfy general education science requirements. (Spring, Odd Years)

PHYS 4243 SOLID STATE PHYSICS *3 credit hours* This is a thorough introductory course in modern solid-state physics. Main topics of the course include principles of behavior of electrons in solids, crystal structure and diffraction, free electron gas, elementary band theory, semiconductors, magnetism and superconductivity. Lecture 3 hours. Prerequisites: PHYS 1215 or 2015 and MATH 3253 or concurrent enrollment. Will not satisfy general education science requirements.

PHYS 4401 OPTICS LABORATORY *1 credit hour* Selected experiments in ray optics, diffraction, refraction, image formation, interference, lenses, mirrors, lasers, dispersion, polarization and holography. Laboratory 2 hours. Prerequisite: PHYS 4403 or concurrent enrollment. Will not satisfy general education science requirements. (Fall)

PHYS 4403* LIGHT AND OPTICS *3 credit hours* 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 or PHYS 2025 and MATH 2215. Will not satisfy general education science requirements. (Fall)

PHYS 4481-3 ADVANCED TOPICS IN PHYSICS *1-3 credit hours* This lecture-based course will focus on a topic or topics of current interest in physics. Lecture 1-3 hours. Prerequisite: PHYS 3003. Will not satisfy general education science requirements.

PHYS 4491-3 SPECIAL PROBLEMS IN PHYSICS *1-3 credit hours* 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. Normally graded on S/U basis. Independent study 1-3 hours. Prerequisites: 10 hours of Physics and department permission. Will not satisfy general education science requirements.

PHYS 4541* PHYSICS CAPSTONE *1 credit hour* The course involves student preparation and presentation or original and/or library research topics. The course will

also explore issues related to becoming a morally responsible scientist to ethical problem solving. Oral presentations and written reports are required. One scheduled presentation will be given outside of class time. Program assessment is also a component. Capstone/lecture 1 hour. Prerequisite: PHYS 2541 and Senior standing. Will not satisfy general education science requirements. (Spring)

POLISH (PLSH)

Communication, English, and Foreign Languages

PLSH 4153* INTENSIVE STUDIES IN POLISH *3 credit hours* An intensive introductory study of Polish combining guided independent study of the written language with regular oral practice of the spoken language. Two hours independent study, one-hour lab. Prerequisites: ENGL 1213 and six hours study of another foreign language or permission of the department.

POLITICAL SCIENCE (PS)

Social Sciences

PS 1113* AMERICAN FEDERAL GOVERNMENT *3 credit hours* 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: Students must be eligible for ENGL 1113. General Education, Political Science.

PS 2023* STATE AND LOCAL GOVERNMENT *3 credit hours* A study of the various political units in the United States with emphasis on states, counties, and municipalities. Lecture 3 hours. Prerequisites: PS 1113 and ENGL 1213.

PS 2113* CONCEPTS OF POLITICAL SCIENCE *3 credit hours* An introduction to basic political concepts, institutions and processes, as well as a review of career opportunities for political scientists. Lecture 3 hours. Prerequisites: PS 1113 and ENGL 1213. (Fall, Odd Years)

PS 2793* RESEARCH METHODS IN POLITICAL SCIENCE *3 credit hours* 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. Prerequisites: STAT 1513. (Fall, Even Years)

PS 3013* POLITICAL PARTIES AND INTEREST GROUPS *3 credit hours* 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. Prerequisites: PS 1113 and ENGL 1213.

PS 3023* PUBLIC OPINION *3 credit hours* 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. Prerequisites: PS 1113 and ENGL 1213.

PS 3033* INTRODUCTION TO INTERNATIONAL RELATIONS *3 credit hours* An introduction to the history, theories, and practices of international relations. Students will be exposed to the analytical tools of international relations as a means of helping them understand and analyze global events and issues. Lecture topics will include terrorism, human rights, the environment, war, collective security, nationalism, imperialism, foreign policy, gender and income inequality, development and aid, and globalization among others. Lecture 3 hours. Prerequisite: ENGL 1213.

PS 3043* THE MEDIA IN AMERICAN POLITICS *3 credit hours* 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. Lecture 3 hours. Prerequisites: PS 1113 and ENGL 1213.

PS 3113* PUBLIC ADMINISTRATION AND POLICY *3 credit hours* 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. Prerequisites: PS 1113 and ENGL 1213.

PS 3213* GLOBAL POLITICAL ECONOMY *3 credit hours* An introduction to the economic and international relations issues of trade, finance, production networks, state economic policies, development economics, inequality, international finance organizations, and globalization. The course introduces students to perspectives of economic liberalism, mercantilism, and structuralism that they can use to analyze global political problems. Lecture 3 hours. Prerequisite: PS 1113 and ENGL 1213.

PS 3333* INTERNATIONAL SECURITY *3 credit* An introduction to the concepts, problems, and theories of international security research. The course examines various critical perspectives as they apply to different political systems around the world, including human security, political security, environmental security, health security, food security, and economic security. Lecture 3 hours. Prerequisites: PS 1113 and ENGL 1213.

PS 3483* THE AMERICAN PRESIDENCY *3 credit hours* A comprehensive study of the American Presidency with emphasis on the office's powers, influence and selection process. The course will also deal with relations between the President and other branches of government. Lecture 3 hours. Prerequisites: PS 1113 and ENGL 1213.

PS 3513* THE LEGISLATIVE PROCESS *3 credit hours* 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. Prerequisites: PS 1113 and ENGL 1213.

PS 3603* INTRODUCTION TO POLITICAL THOUGHT *3 credit hours* 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. Prerequisites: PS 1113 and ENGL 1213. (Spring, Even Years)

PS 3633* AMERICAN POLITICAL THOUGHT *3 credit hours* 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. Prerequisites: PS 1113 and ENGL 1213.

PS 3721-3 INTERNSHIP IN POLITICAL SCIENCE *1-3 credit hours* 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. Internship 1-3 hours. Prerequisites: PS 1113 and ENGL 1213, Political Science major.

PS 3813* CONSTITUTIONAL LAW AND GOVERNMENT: THE AMERICAN EXPERIENCE *3 credit hours* 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. Prerequisites: PS 1113 and ENGL 1213.

PS 4023* SPECIAL TOPICS: WORLD REGIONAL POLITICS *3 credit hours* A comparative analysis of the political institutions and processes of a selected world religion. The course will be taught with a different regional focus, including the Middle East, Latin America, Asia and Eastern Europe. The course may be taken twice, given a different regional focus. Lecture 3 hours. Prerequisites: PS 1113 and ENGL 1213.

PS 4053* U.S. FOREIGN POLICY *3 credit hours* An examination of the content, formulation, and execution of U.S. foreign policy, with emphasis on the post-World 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. Prerequisites: PS 1113 and ENGL 1213.

PS 4253* THE JUDICIAL PROCESS *3 credit hours* 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. Prerequisites: PS 1113 and ENGL 1213.

PS 4491-3* SELECTED TOPICS IN POLITICAL SCIENCE *1-3 credit hours* 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. Prerequisites: PS 1113 and ENGL 1213.

PS 4591-3* INDEPENDENT STUDY IN POLITICAL SCIENCE *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisites: PS 1113 and ENGL 1213, Political Science major, junior standing, and instructor permission.

PS 4683* ACADEMIC RESEARCH IN POLITICAL SCIENCE *3 credit hours* This course consists of relevant readings and discussion to assist Political Science majors with developing a more complete understanding of the discipline as a whole and in applying knowledge gained throughout their studies to create an original written thesis. This course also provides an opportunity for students to examine career opportunities as well as further options to continue their education. Students will also complete an examination designed to assess their overall knowledge of Political Science as well as their critical thinking skills. Capstone/lecture 3 hours. Prerequisites: ENGL 1213 and PS 1113. PS 2113 and PS 2793 strongly recommended. (Spring, Odd Years)

PORTUGUESE (PORT)

Communication, English, and Foreign Languages

PORT 4153* INTENSIVE STUDIES IN PORTUGUESE *3 credit hours* An intensive introductory study of Portuguese combining guided independent study of the written language with regular oral practice of the spoken language. Two hours independent study, one-hour lab. Prerequisites: ENGL 1213 and six-hours study of another Romance language or permission of the department.

PORT 4961-3* DIRECTED READINGS IN PORTUGUESE *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: PORT 4153.

PROFESSIONAL WRITING (PRWR)

Communication, English, and Foreign Languages

PRWR 2013* INTRODUCTION TO CREATIVE WRITING *3 credit hours* A beginning level course for persons interested in writing literary fiction and/or poetry. Lecture 3 hours. Prerequisite: Students must be ENGL 1113 eligible. (Spring)

PRWR 3003* TECHNIQUES OF FICTION *3 credit hours* A study of the technical features of contemporary literary fiction, including close analysis, writing exercises, and round table workshops of original student work. Lecture 3 hours. Prerequisite: PRWR 2013 or department permission.

PRWR 3013* TECHNIQUES OF POETRY *3 credit hours* A study of the technical features of contemporary literary poetry, including close analysis, writing exercises, and round table workshops of original student work. Lecture

3 hours. Prerequisite: PRWR 2013 or department permission.

PRWR 3103* CREATIVE WRITING–THE SHORT STORY *3 credit hours* An intensive study of the literary short story. Students experiment with traditional and contemporary forms of the genre through writing exercises and round table workshops of original student work. Publishing is discussed. Lecture 3 hours. Prerequisites: PRWR 2013 and junior standing or department permission.

PRWR 3203* CREATIVE WRITING–POETRY *3 credit hours* Practice in traditional and contemporary poetic forms. Students create and workshop original poems. Publishing is discussed. Lecture 3 hours. Prerequisite: PRWR 2013 or department permission.

PRWR 3303* CREATIVE WRITING–NONFICTION *3 credit hours* An intensive study of creative nonfiction. Students experiment with traditional and contemporary forms of the genre through writing exercises and round table workshops of original student work. Publishing is discussed. Lecture 3 hours. Prerequisite: PRWR 2013 or department permission. (Spring)

PRWR 3403* CREATIVE WRITING–THE NOVEL *3 credit hours* An intensive study of the literary novel. Students experiment with traditional and contemporary forms of the genre, crafting 4 book proposals and at least 50 pages of an original novel for round table workshop. Publishing is discussed. Lecture 3 hours. Prerequisites: PRWR 3003 or 3103 and junior standing or department permission.

PRWR 3991-3* WRITING WORKSHOP *1-3 credit hours* An intensive concentration on a special aspect of creative writing. Focus will vary semester to semester, but special topics may include writing for children and young adults, sudden fiction, inspirational writing, nature writing, memoir, sports writing, and short story cycles. May be repeated with different topics to a maximum of 6 hours. Workshop 1-3 hours. Prerequisite: PRWR 2013 or department permission.

PRWR 4003* ONLINE MAGAZINE EDITING *3 credit hours* Students learn to solicit, evaluate, and select literary fiction, nonfiction, and poetry for production of *The Oklahoma Review*. May be repeated to a total of 6 hours. Lecture 3 hours. Prerequisites: PRWR 2013 and junior standing or department permission.

PRWR 4961-3* DIRECTED WRITING *1-3 credit hours* An individualized program of intensive independent writing with supplemental reading under the supervision of a qualified member of the faculty. May be repeated to a total of 6 hours. Independent study/directed readings 1-3 hours. Prerequisites: PRWR 2013 and junior standing or department permission.

PSYCHOLOGY (PSY)

Psychology

PSY 1113* GENERAL PSYCHOLOGY *3 credit hours* A study of the basic facts and principles of behavior. Lecture 3 hours. General Education, Behavioral Science. (Fall, Spring, Summer)

PSY 2001-3* SELECTED TOPICS IN PSYCHOLOGY *1-3 credit hours* Contemporary and historical concerns of Psychology are explored. A different topic may be presented each semester. Lecture 1-3 hours. Prerequisite: PSY 1113.

PSY 2113* HISTORY OF PSYCHOLOGY *3 credit hours* A study of modern psychology as a science with emphasis on past and present schools of psychological thought. Lecture 3 hours. Prerequisite: PSY 1113. (Fall, Spring)

PSY 2223* APPLIED PSYCHOLOGY *3 credit hours* Psychological principles in relation to problems of Business, Industry, Education, Mental Health, or other human enterprises. Lecture 3 hours. Prerequisite: PSY 1113.

PSY 2373* INTRODUCTION TO HEALTH PSYCHOLOGY *3 credit hours* 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.

PSY 3313* COGNITIVE PSYCHOLOGY *3 credit hours* Examines cognition involving language, thinking, problem solving, memory, intelligence, and categorization. Lecture 3 hours. Prerequisite: PSY 1113.

PSY 3333 COUNSELING AND CLINICAL PSYCHOLOGY *3 credit hours* An introduction to the helping profession for students considering counseling or clinical psychology as a career. Lecture 3 hours. Prerequisite: PSY 1113.

PSY 3353* LIFESPAN HUMAN GROWTH AND DEVELOPMENT *3 credit hours* Survey of the psychological changes across the life span. Cognitive, social, emotional, and physical changes from birth to death will be examined. Lecture 3 hours. Prerequisite: PSY 1113. (Fall, Spring)

PSY 3363* PSYCHOLOGY OF MIDDLE CHILDHOOD *3 credit hours* This course will include and in-depth study of the theories, research, and findings in the biological, psychological, and social development of middle childhood (age 7-11). Lecture 3 hours. Prerequisite: PSY 1113. (Fall)

PSY 3373* PSYCHOLOGY OF ADOLESCENCE AND EMERGING ADULTHOOD *3 credit hours* An in-depth study of the theories, research, and findings in the biological, psychological, and social development of adolescence and emerging adulthood (ages 12-30). Prerequisite: PSY 1113. (Spring)

PSY 3383* SOCIAL PSYCHOLOGY *3 credit hours* The study of human behavior as affected by social stimuli. Lecture 3 hours. Prerequisite: PSY 1113.

PSY 3413* PSYCHOLOGY OF LEARNING *3 credit hours* Investigations into the processes of learning in humans

and animals. Emphasis is given to behavioral and cognitive approaches. Lecture 3 hours. Lecture 3 hours. Prerequisite: PSY 1113. (Fall, Spring)

PSY 3423 APPLIED QUANTITATIVE METHODS *3 credit hours* 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 STAT 1513. (Fall, Spring)

PSY 3453 QUANTITATIVE ANALYSIS AND INTERPRETATION *3 credit hours* A strong emphasis will be placed on inferential analysis and interpretation procedures used in published articles in psychological journals. Students will become familiar with various software packages (e.g., Excel, SPSS, and PowerPoint) and their use in the analysis and interpretation process. Analyses, interpretation, and presentation of independent and dependent t-tests, correlational testing, linear regression, simple and factorial ANOVAs, tests for outliers, normalcy, randomness, heterogeneity of variance, and post-hoc analyses will be included. Prerequisites: A grade of "C" or higher in PSY 3423.

PSY 4313 PSYCHOLOGICAL TESTING *3 credit hours* A general survey of the principles, backgrounds, and procedures of psychological testing. Attention is given to interpretation of measuring instruments in the fields of personality and intelligence. Lecture 3 hours. Prerequisite: PSY 1113.

PSY 4323* SENSATION AND PERCEPTION *3 credit hours* An in-depth study 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). Lecture 3 hours. Prerequisite: PSY 1113.

PSY 4331-3 SEMINAR IN PSYCHOLOGY *1-3 credit hours* 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.) Seminar 1-3 hours.

PSY 4363* ABNORMAL PSYCHOLOGY *3 credit hours* The study of various abnormalities as described in DSM. Lecture 3 hours. Prerequisite: PSY 1113. (Fall, Spring)

PSY 4393* PERSONALITY *3 credit hours* Factors determining and affecting personality, its development and assessment. Lecture 3 hours. Prerequisite: PSY 1113. (Fall, Spring)

PSY 4423 EXPERIMENTAL PSYCHOLOGY *3 credit hours* Studies in the major designs, methods employed and problems in conducting experiments in psychological research. Lecture 3 hours. Prerequisite: PSY 1113. (Fall, Spring)

PSY 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/capstone 3 hours. Prerequisites: PSY 1113, grade of "C" or higher in PSY 3423, and grade of "C" or higher in PSY 4423. (Fall, Spring)

PSY 4443* BIOPSYCHOLOGY *3 credit hours* 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.

PSY 4453 PROFESSIONAL RESEARCH IN PSYCHOLOGY *3 credit hours* Students will work individually with a department faculty member to develop and present a psychological research project of professional quality. The presentation will take place as a conference paper, conference poster, or by submission of a manuscript to a peer-reviewed psychological journal. Independent study/directed readings 3 hours. Prerequisite: PSY 4423.

PSY 4461-3 INTERNSHIP IN PSYCHOLOGY OR FAMILY AND CHILD STUDIES *1-3 credit hours* Supervised work experience in a professional setting related to the disciplines of Psychology or Family and Child Studies. The internship will allow students to encounter practical workplace situations and gain experience in interacting with populations served within the mental health or human services fields. Students may earn a maximum of 6 internship credit hours, with a maximum of 3 credit hours in any one internship. Internships must be at pre-approved sites, and the internship contract must be signed prior to the start of the semester. Internship 1-3 hours. Prerequisites: PSY 1113 or FAMS 1123, and 12 hours of PSY or FAMS courses and Junior standing, and major GPA of 3.0 or higher.

PSY 4501 PSYCHOLOGY OF LOVE *1 credit hour* This workshop focuses on the psychological theories of love relationships within heterosexual relationships in marriage, courting, dating, attraction, cohabitation, and such. Theoretical models of Fehr, Lee, Rubin, Kelley, Grey, Smalley, Harley, and others are discussed. Seminar 1 hour.

PSY 4511 DIFFERENCES IN RELATIONSHIPS BETWEEN MEN AND WOMEN *1 credit hour* We always hear the words "*he said…she said*" in relationships between the sexes. In this workshop we investigate the many differences in relationships between a man and a woman involving friendship, dating, courtship, engagement, marriage, parenting, attraction, jealousy, sex, thought-processing, needs assessment, separation models, and infidelity issues. Seminar 1 hour.

PSY 4521 PSYCHOLOGY OF DREAMING *1 credit hour* This workshop focuses on the psychological theories of dreams according to Freud, Jung, Adler, and other theorists. Other areas will include sleep stages and physical characteristics influencing psychological dream states. Seminar 1 hour.

PSY 4531 STEPFAMILIES *1 credit hour* Even Cinderella had to deal with step-sisters. Divorce or death, and then

remarriage involves many new complexities and relationships. This workshop investigates the family dynamics of step-families, relationships in step-families, step-parenting, power and equality within the blended family, children's issues of "*intact and step*" relationships, financial pressures in step-families, and issues involved in being the step-child. Seminar 1 hour.

PSY 4541 BOYS TO MEN: THE CREATION OF MASCULINITY IN LITTLE BOYS *1 credit hour* "*Me Tarzan… You Jane!*" Mothers, watch out. Your little boy wants to grow up. The student will investigate the masculine needs of the male gender and developmental stages involving male maturity, as well as the issues that surround this wonderful part of life! The student will be challenged to look at concepts and theoretical models portraying boys that are "*wild at heart*" and the boy's need to "*capture the key*" from their mothers to run with the "*wild man*." Seminar 1 hour.

PSY 4551 PARAPSYCHOLOGY *1 credit hour* This course has been designed to cover one of the (sometimes) controversial areas of psychology, that of parapsychological phenomenon. We will first study how each of the phenomena is defined, and then look at the research supporting that area, as well as some of the criticisms that have arisen. Seminar 1 hour.

PSY 4561 PSYCHOLOGY OF BEHAVIORAL ADDICTION *1 credit hour* Ever hear "*I just can't stop*" or "*It doesn't hurt me or anyone else*" or "*Why don't I change?*"? This workshop will investigate many aspects and concepts of "*Behavior Addiction*" in a psychological reference. Gambling, sex, internet and cell phone use, shopping, video games, food, and such are just a few areas of discussion. The student will dive into the theoretical study of personality, family, relationships, compulsiveness, pleasure and arousal, rituals, and other concepts to study the addiction cycle and to gain more knowledge of this topic. Seminar 1 hour.

PSY 4571 PSYCHOLOGY OF FEAR *1 credit hour* "Lions, Tigers and Bears… Oh MY!!!" Why do we show fear? Why do we show fear when we shouldn't? This seminar investigates the psychological theories of fear, the five basic types of fears, categorization of fear and phobia, biological and neurological concepts of fear, social learning and conditioning of fear, fear addiction and magnetism, and overcoming fear. Seminar 1 hour.

PSY 4581 ANGER MANAGEMENT *1 credit hour* Anger is neither good nor bad. Anger is a resource, and signal, letting us know that something needs to change. Anger is a tool It can manipulate. It can protect. Anger is something that we feel, both emotionally, and physically. When we are angry, we are some-other-emotion, too. This workshop will discuss the effective techniques that can be used to manage anger. Seminar 1 hour.

PSY 4591 ANXIETY AND DEPRESSION MANAGEMENT *1 credit hour* Anxiety and depression are powerful human emotions that many people have experienced at one time or another. Cognitive-Behavioral (basically thinking and action oriented) treatment approaches, which can help an individual learn to manage their life, as well as other treatment approaches will be discussed in this workshop. Seminar 1 hour.

PSY 4601 INFIDELITY *1 credit hour* Is it cheating… adultery… having an affair? Is it the subjective feeling that my spouse or lover has violated the rules of the relationship? This seminar will investigate different theories and concepts involving "*infidelity*" such as betrayal, jealousy, rivalry, emotional and physical issues, assumptions, and expectations that develop and are assumed in relationships. Seminar 1 hour.

PUBLIC RELATIONS (PBRL)

Communication, English, and Foreign Languages

PBRL 2113* INTRODUCTION TO PUBLIC RELATIONS *3 credit hours* An introduction to the history, development, and ethical practice of public relations as relationship management between an organization and its public. Emphasis on building a philosophical foundation for the practice of advocacy through public relations. Lecture 3 hours. (Fall)

PBRL 3213* PUBLIC RELATIONS WRITING AND PRODUCTION *3 credit hours* Study and application of current trends and best practices in public relations. Includes instruction in communication methods and tactics, with emphasis on the production and dissemination of strategic communication messages. Lecture 3 hours. Prerequisites: JRMP 3523 and PBRL 2113.

PBRL 3323*STRATEGIC CAMPAIGN COMMUNICATION *3 credit hours* This course explores the planning, preparation and presentation of strategic communication campaigns. Emphasis on developing and integrating theories and strategies for campaign communication. Analysis and critique of public relations campaigns. Lecture 3 hours. Prerequisite: Students must be English Composition I eligible (i.e., have no English deficiencies).

PBRL 3941-3 WORKSHOP *1-3 credit hours* Public relations workshop designed to give intensive emphasis to a specific area of the profession. May be repeated with a different topic for a total of 6 credit hours. Workshop 1-3 hours.

PBRL 4413* PUBLIC RELATIONS ETHICS *3 credit hours* This course explores the nature of public relations from an ethical and philosophical perspective, including ethical decision making in public relations, truth telling, objectivity, and the justification of persuasion use in the marketplace of ideas. Themes of responsible advocacy and representation in the "Courts of Public Opinion" will underscore the course. Lecture 3 hours. Prerequisite: Students must be English Composition I eligible (i.e., have no English deficiencies).

PBRL 4823 CASE STUDIES IN PUBLIC RELATIONS *3 credit hours* 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: Students must be English Composition I eligible (i.e., have no English deficiencies).

PBRL 4931-3* SPECIAL TOPICS *1-3 credit hours* Directed individual or group study of selected topic(s) in public relations. Course may be repeated.

PBRL 4973 PUBLIC RELATIONS INTERNSHIP *3 credit hours* Field experience in public relations in organizations, business, and industry. Internship/field experience 3 hours. Prerequisite: 12 hours of Journalism and Public Relations or permission of the instructor.

RADIO/TELEVISION (RTV)

Communication, English, and Foreign Languages

RTV 1013* FUNDAMENTALS OF BROADCASTING *3 credit hours* Survey of components of broadcasting and other electronic media systems in America, including technical aspects, history, legal and social issues. Lecture 3 hours.

RTV 3223 ADVANCED RADIO PRODUCTION *3 credit hours* 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.

RADIOLOGIC TECHNOLOGY (RAD)

Agriculture, Biology, and Health Sciences

RAD 2012 INTRODUCTION TO RADIOLOGIC SCIENCES AND HEALTH CARE *2 credit hours* Provides an overview of the foundations of radiography and the practitioner's role in health care delivery and includes a minimum of 82.5 contact hours of clinical training. Principles, practices, and policies of health care organizations are examined and discussed in addition to the professional responsibilities of the radiographer and will include a clinical component. Clinical practice experiences are designed to provide patient care and assessment, competent performance of radiologic imaging, and total quality management. Levels of competency and outcomes measurement will be taught to ensure the well-being of the patient prior to, during, and following the radiologic procedure. Lecture 1 hour, Clinical 5.5 hours. Prerequisite: Acceptance into the Radiologic Technology Program and departmental permission. Corequisite: RAD 2012L. Will not satisfy general education science requirements. (Fall)

RAD 2012L INTRODUCTION TO RADIOLOGIC SCIENCES AND HEALTH CARE LAB *0 credit hours* LAB: Provides an overview of the foundations of radiography and the practitioner's role in health care delivery and includes a minimum of 82.5 contact hours of clinical training. Principles, practices, and policies of health care organizations are examined and discussed in addition to the professional responsibilities of the radiographer and will include a clinical component. Clinical practice experiences are designed to provide patient care and assessment, competent performance of radiologic imaging, and total quality management. Levels of competency and outcomes measurement will be taught to ensure the well-being of the patient prior to, during, and following the radiologic procedure. Lecture 1 hour, Clinical 5.5 hours. Prerequisite: Acceptance into the Radiologic Technology Program and departmental permission. Corequisite: RAD 2012. Will not satisfy general education science requirements. (Fall)

RAD 2113 PATIENT CARE IN RADIOLOGIC SCIENCES *3 credit hours* Content provides the concepts of optimal patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures are described, as well as infection control procedures using standard precautions. Additionally, the course content provides a foundation in ethics and law related to the practice of medical imaging. An introduction to terminology, concepts and principles will be presented. Students will examine a variety of ethical and legal issues found in clinical practice. Lecture 1 hour, lab 5 hours. Prerequisite: Acceptance into Radiologic Technology Program and departmental permission. Corequisite: RAD 2113L. Will not satisfy general education science requirements. (Fall)

RAD 2113L PATIENT CARE IN RADIOLOGIC SCIENCES LAB *0 credit hours* LAB: Content provides the concepts of optimal patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care procedures are described, as well as infection control procedures using standard precautions. Additionally, the course content provides a foundation in ethics and law related to the practice of medical imaging. An introduction to terminology, concepts and principles will be presented. Students will examine a variety of ethical and legal issues found in clinical practice. Lecture 1 hour, lab 5 hours. Prerequisite: Acceptance into Radiologic Technology Program and departmental permission. Corequisite: RAD 2113. Will not satisfy general education science requirements. (Fall)

RAD 2123 RADIATION PHYSICS *3 credit hours* Content establishes a basic knowledge of radiation production and characteristics of atomic structure and terminology. Also presented are the nature and characteristics of radiation, x-ray production, and the fundamentals of photon interactions with matter. Additionally, the course establishes a knowledge base in imaging equipment of radiographic, fluoroscopic and mobile equipment requirements and design. The content also provides a basic knowledge of quality control. Lecture 1 hour, Lab 5 hours. Prerequisite: Acceptance into Radiologic Technology Program and department permission. Will not satisfy general education science requirements. (Fall)

RAD 2123L RADIATION PHYSICS LAB *0 credit hours* LAB: Content establishes a basic knowledge of radiation production and characteristics of atomic structure and terminology. Also presented are the nature and

characteristics of radiation, x-ray production, and the fundamentals of photon interactions with matter. Additionally, the course establishes a knowledge base in imaging equipment of radiographic, fluoroscopic and mobile equipment requirements and design. The content also provides a basic knowledge of quality control. Lecture 1 hour, Lab 5 hours. Prerequisite: Acceptance into Radiologic Technology Program and department permission. Corequisite: RAD 2123. Will not satisfy general education science requirements. (Fall)

RAD 2134 RADIOGRAPHIC PROCEDURES AND IMAGE ANALYSIS I *4 credit hours* Content provides the knowledge base necessary to perform standard imaging procedures and special studies within the corresponding semester. Consideration is given to the evaluation of optimal diagnostic images. Content provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation and the factors than can affect image quality. Actual images will be included for analysis. Additionally, this course establishes a knowledge base in radiography anatomy and physiology taught within the semester and will include a lab component. Components of the cells, tissues, organs and body systems are described and discussed. The fundamentals of sectional anatomy relative to routine radiography are addressed. Lecture 1 hour, Lab 7.5 hours. Prerequisite: Acceptance into Radiologic Technology Program and department permission. Corequisite: RAD 2134L. Will not satisfy general education science requirements. (Fall)

RAD 2134L RADIOGRAPHIC PROCEDURES AND IMAGE ANALYSIS I LAB *0 credit hours* LAB: Content provides the knowledge base necessary to perform standard imaging procedures and special studies within the corresponding semester. Consideration is given to the evaluation of optimal diagnostic images. Content provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation and the factors than can affect image quality. Actual images will be included for analysis. Additionally, this course establishes a knowledge base in radiography anatomy and physiology taught within the semester and will include a lab component. Components of the cells, tissues, organs and body systems are described and discussed. The fundamentals of sectional anatomy relative to routine radiography are addressed. Lecture 1 hour, Lab 7.5 hours. Prerequisite: Acceptance into Radiologic Technology Program and department permission. Corequisite: RAD 2134. Will not satisfy general education science requirements. (Fall)

RAD 2204 CLINICAL PRACTICE I *4 credit hours* Content and clinical practice experiences are designed to sequentially develop, apply, critically analyze, integrate, synthesize and evaluate concepts and theories in the performance of radiologic procedures within the corresponding semester and 330 contact hours of clinical training. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice, and professional development are discussed, examined, and evaluated. Clinical practice experiences are designed to provide patient care and assessment, competent performance of radiologic imaging, and total quality management. Levels of competency and outcomes measurement will be taught to ensure the well-being of the patient prior to, during, and following the radiologic procedure. Clinical 22 hours. Prerequisite: RAD 2134. Will not satisfy general education science requirements. (Spring)

RAD 2214 PRINCIPLES OF EXPOSURE *4 credit hours* Content establishes a knowledge base in technical factors that govern the image production process. Lecture 4 hours. Prerequisite: RAD 2134. Will not satisfy general education science requirements. (Spring)

RAD 2224 RADIOGRAPHIC PROCEDURES AND IMAGE ANALYSIS II *4 credit hours* Content provides the knowledge base necessary to perform standard imaging procedures and special studies within the corresponding semester. Consideration is given to the evaluation of optimal diagnostic images. Content provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation, and the factors than can affect image quality. Actual images will be included for analysis. Additionally, this course establishes a knowledge base in radiography anatomy and physiology taught within the semester and will include a lab component. Components of the cells, tissues, organs and body systems are described and discussed. The fundamentals of sectional anatomy relative to routine radiography are addressed. Lecture 2 hours, laboratory 5 hours. Prerequisite: RAD 2134. Corequisite: RAD 2224L. Will not satisfy general education science requirements. (Spring)

RAD 2224L RADIOGRAPHIC PROCEDURES AND IMAGE ANALYSIS II LAB *0 credit hours* LAB: Content provides the knowledge base necessary to perform standard imaging procedures and special studies within the corresponding semester. Consideration is given to the evaluation of optimal diagnostic images. Content provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation, and the factors than can affect image quality. Actual images will be included for analysis. Additionally, this course establishes a knowledge base in radiography anatomy and physiology taught within the semester and will include a lab component. Components of the cells, tissues, organs and body systems are described and discussed. The fundamentals of sectional anatomy relative to routine radiography are addressed. Lecture 2 hours, laboratory 5 hours. Prerequisite: RAD 2134. Corequisite: RAD 2224.

Will not satisfy general education science requirements. (Spring)

RAD 2302 CLINICAL PRACTICE II *2 credit hours* Content and clinical practice experiences are designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures within the corresponding semester and a minimum of 165 contact hours of clinical training. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice, and professional development are discussed, examined, and evaluated. Clinical practice experiences are designed to provide patient care and assessment, competent performance of radiologic imaging, and total quality management. Levels of competency and outcomes measurement will be taught to ensure the well-being of the patient prior to, during, and following the radiologic procedure. Clinical 11 hours. Prerequisite: RAD 2224. Will not satisfy general education science requirements. (Summer)

RAD 2311 BASIC PRINCIPLES OF COMPUTED TOMOGRAPHY *1 credit hour* Content is designed to provide entry-level radiography students or radiologic technologists with an introduction to and basic understanding of the operation of a computed tomography (CT) device. Content is not intended to result in clinical competency, but when available, radiography programs with sufficient resources will provide students with clinical exposure to computed tomography. Lecture 1 hour. Prerequisite: RAD 2224. Will not satisfy general education science requirements. (Summer)

RAD 2323 RADIOGRAPHIC PROCEDURES AND IMAGE ANALYSIS III *3 credit hours* Content provides the knowledge base necessary to perform standard imaging procedures and special studies within the corresponding semester. Consideration is given to the evaluation of optimal diagnostic images. Content provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation, and the factors than can affect image quality. Actual images will be included for analysis. Additionally, this course establishes a knowledge base in radiography anatomy and physiology taught within the semester and will include a lab component. Components of the cells, tissues, organs and body systems are described and discussed. The fundamentals of sectional anatomy relative to routine radiography are addressed. Lecture 2 hours, laboratory 2.5 hours. Prerequisite: RAD 2224. Corequisite: RAD 2323L. Will not satisfy general education science requirements. (Summer)

RAD 2323L RADIOGRAPHIC PROCEDURES AND IMAGE ANALYSIS III LAB *0 credit hours* LAB: Content provides the knowledge base necessary to perform standard imaging procedures and special studies within the corresponding semester. Consideration is given to the evaluation of optimal diagnostic images. Content provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation and the factors than can affect image quality. Actual images will be included for analysis. Additionally, this course establishes a knowledge base in radiography anatomy and physiology taught within the semester and will include a lab component. Components of the cells, tissues, organs and body systems are described and discussed. The fundamentals of sectional anatomy relative to routine radiography are addressed. Lecture 2 hours, laboratory 2.5 hours. Prerequisite: RAD 2224. Corequisite: RAD 2323. Will not satisfy general education science requirements. (Summer)

RAD 2402 RADIOGRAPHIC PATHOLOGY *2 credit hours* Content introduces concepts related to disease and etiological considerations with emphasis on radiographic appearance of disease and impact on exposure factor selection. Lecture 2 hours. Prerequisite: RAD 2323. Will not satisfy general education science requirements. (Fall)

RAD 2414 CLINICAL PRACTICE III *4 credit hours* Content and clinical practice experiences are designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures within the corresponding semester and includes a minimum of 330 contact hours of clinical training. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences are designed to provide patient care and assessment, competent performance of radiologic imaging, and total quality management. Levels of competency and outcomes measurement will be taught to ensure the well-being of the patient prior to, during, and following the radiologic procedure. Clinical 22 hours. Prerequisite: RAD 2323. Will not satisfy general education science requirements. (Fall)

RAD 2422 DIGITAL IMAGE ACQUISITION AND DISPLAY *2 credit hours* Content imparts an understanding of the components, principles, and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving, and retrieval are discussed. Principles of digital system quality assurance and maintenance are presented. Lecture 2 hours. Prerequisite: RAD 2323. Will not satisfy general education science requirements. (Fall)

RAD 2434 RADIOGRAPHIC PROCEDURES AND IMAGE ANALYSIS IV *4 credit hours* Content provides the knowledge base necessary to perform standard imaging procedures and special studies within the corresponding semester. Consideration is given to the evaluation of optimal diagnostic images. Content provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation, and the

factors than can affect image quality. Actual images will be included for analysis. Additionally, this course establishes a knowledge base in radiography anatomy and physiology taught within the semester and will include a lab component. Components of the cells, tissues, organs and body systems are described and discussed. The fundamentals of sectional anatomy relative to routine radiography are addressed. Lecture 3 hours, laboratory 1 hour. Prerequisite: RAD 2323. Corequisite: RAD 2434L. Will not satisfy general education science requirements. (Fall)

RAD 2434L RADIOGRAPHIC PROCEDURES AND IMAGE ANALYSIS IV LAB *0 credit hours* LAB: Content provides the knowledge base necessary to perform standard imaging procedures and special studies within the corresponding semester. Consideration is given to the evaluation of optimal diagnostic images. Content provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation, and the factors than can affect image quality. Actual images will be included for analysis. Additionally, this course establishes a knowledge base in radiography anatomy and physiology taught within the semester and will include a lab component. Components of the cells, tissues, organs and body systems are described and discussed. The fundamentals of sectional anatomy relative to routine radiography are addressed. Lecture 3 hours, laboratory 1 hour. Prerequisite: RAD 2323. Corequisite: RAD 2434. Will not satisfy general education science requirements. (Fall)

RAD 2503 CLINICAL PRACTICE IV *3 credit hours* Content and clinical practice experiences are designed to sequentially develop, apply, critically analyze, integrate, synthesize, and evaluate concepts and theories in the performance of radiologic procedures within the corresponding semester and includes a minimum of 247.5 contact hours of clinical training. Through structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, and evaluated. Clinical practice experiences are designed to provide patient care and assessment, competent performance of radiologic imaging, and total quality management. Levels of competency and outcomes measurement will be taught to ensure the well-being of the patient prior to, during, and following the radiologic procedure. Clinical 16.5 hours. Prerequisite: RAD 2434. Will not satisfy general education science requirements. (Spring)

RAD 2513 RADIATION BIOLOGY AND PROTECTION *3 credit hours* Content provides an overview of the principles of interaction of radiation with living systems. Radiation effects on molecules, cells, tissues and the body as a whole are presented. Factors affecting biological response are presented, including acute and chronic effects of radiation. Content also presents an overview of the principles of radiation protection, including the responsibilities of the radiographer for patients, personnel, and the public. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies, and health care organizations are incorporated. Lecture 3 hours. Prerequisite: RAD 2434. Will not satisfy general education science requirements. (Spring)

RAD 2523 PHARMACOLOGY AND VENIPUNCTURE *3 credit hours* Content provides basic concepts of pharmacology, venipuncture, and administration of diagnostic contrast agents and intravenous medications. The appropriate delivery of patient care during these procedures is emphasized. Content is also designed to provide a brief overview of other imaging modalities and treatment to include equipment, dose differences, and types of radiation, patient preparations, indications, and contraindications. Educational and certification requirements are also included. Lecture 2 hours, laboratory 2.5 hours. Prerequisite: RAD 2434. Corequisite: RAD 2253L. Will not satisfy general education science requirements. (Spring)

RAD 2523L PHARMACOLOGY AND VENIPUNCTURE LAB *0 credit hours* LAB: Content provides basic concepts of pharmacology, venipuncture, and administration of diagnostic contrast agents and intravenous medications. The appropriate delivery of patient care during these procedures is emphasized. Content is also designed to provide a brief overview of other imaging modalities and treatment to include equipment, dose differences, and types of radiation, patient preparations, indications, and contraindications. Educational and certification requirements are also included. Lecture 2 hours, laboratory 2.5 hours. Prerequisite: RAD 2434. Corequisite: RAD 2523. Will not satisfy general education science requirements. (Spring)

RAD 2533 RADIOLOGIC TECHNOLOGY SEMINAR *3 credit hours* Content provides a comprehensive review of the radiography curriculum in preparation for taking the certification exam given by The American Registry of Radiologic Technologists (ARRT). Identified areas of weakness will help the student focus on the curriculum items that need concentrated study. The computerized testing format of the ARRT exam will be emphasized, and, upon completion of the course, the student will be expected to apply the knowledge gained to successfully complete mock registry examinations. Seminar 3 hours. Prerequisite: RAD 2434. Will not satisfy general education science requirements. (Spring)

RESPIRATORY CARE (RESP)

Agriculture, Biology, and Health Sciences

RESP 2100 RESPIRATORY CARE RECITATION I *0 credit hours* Review and integrated discussion of information presented in lecture, labs, and clinical experiences during semester one of the clinical training program. Lecture/discussion 0 hours. Prerequisites: Acceptance

into the Respiratory Care Clinical Training Program and departmental permission. Will not satisfy general education science requirements. (Spring)

RESP 2113 RESPIRATORY MECHANICS *3 credit hours* Introduction to infection control procedures, sterilization of common equipment, gas laws, humidity and bland aerosol administration, cardiopulmonary resuscitation, and mock simulations of common respiratory care procedures. Lecture 3 hours, laboratory 2 hours. Prerequisite: Acceptance to the Respiratory Care Clinical Training Program and departmental permission. Corequisite: RESP 2113L. Will not satisfy general education science requirements. (Spring)

RESP 2113L RESPIRATORY MECHANICS LAB *0 credit hours* LAB: Introduction to infection control procedures, sterilization of common equipment, gas laws, humidity and bland aerosol administration, cardiopulmonary resuscitation, and mock simulations of common respiratory care procedures. Lecture 3 hours, laboratory 2 hours. Prerequisite: Acceptance to the Respiratory Care Clinical Training Program and departmental permission. Corequisite: RESP 2113. Will not satisfy general education science requirements. (Spring)

RESP 2123 RESPIRATORY THERAPY PROCEDURES I *3 credit hours* Introduction to respiratory therapy including physical assessment with chart review, medical gas therapy with delivery systems, lung expansion therapy, secretion clearance techniques, pulmonary function testing, and Therapy Driven Protocols. Lecture 2 hours, laboratory 2 hours. Pre-requisite: Acceptance into the Respiratory Care Clinical Training Program and departmental permission. Corequisite: RESP 2123L. Will not satisfy general education science requirements. (Spring)

RESP 2123L RESPIRATORY THERAPY PROCEDURES I LAB *0 credit hours* LAB: Introduction to respiratory therapy including physical assessment with chart review, medical gas therapy with delivery systems, lung expansion therapy, secretion clearance techniques, pulmonary function testing, and Therapy Driven Protocols. Lecture 2 hours, laboratory 2 hours. Lecture 2 hours, laboratory 2 hours. Pre-requisite: Acceptance into the Respiratory Care Clinical Training Program and departmental permission. Corequisite: RESP 2123. Will not satisfy general education science requirements. (Spring)

RESP 2133 CARDIOPULMONARY ANATOMY AND PHYSIOLOGY *3 credit hours* Introduction of the anatomy and physiology of the respiratory and circulatory systems, the concept of ventilation, the diffusion and transport of pulmonary gases, and acid-base balance. Lecture 3 hours. Prerequisites: Admission to the Respiratory Care Clinical Training Program and departmental permission. Will not satisfy general education science requirements. (Spring)

RESP 2143 RESPIRATORY PHARMACOLOGY *3 credit hours* Comprehensive and practical understanding of current information in respiratory pharmacology. Includes theoretical concepts of the physio-pharmacological functions of the lungs, heart, and kidneys applied to both the chronic pulmonary disease patient and the intensive care patient. A wide range of classes of drugs is considered with emphasis on practical choices in individual situations and incorporating evidence-based practice guidelines. Lecture 3 hours. Prerequisites: Admission into the Respiratory Care Clinical Training Program and departmental permission. Will not satisfy general education science requirements. (Spring)

RESP 2153 RESPIRATORY PATHOLOGY *3 credit hours* The study of specific pulmonary, neuromuscular, cardiac, and respiratory-related diseases, covering the methods of assessment, clinical manifestation, radiologic imaging, diagnosis, treatment, and management. Lecture 3 hours. Prerequisites: Admission into the Respiratory Care Clinical Training Program and departmental permission. Will not satisfy general education science requirements. (Spring)

RESP 2161 RESPIRATORY CLINICAL PRACTICE I *1 credit hour* Respiratory procedures practiced with basic assessment and respiratory therapy modalities. Course includes 82.5 contact hours of clinical experience. Clinical practice is coordinated to cover adult and pediatric basic assessment, respiratory therapies, blood gas sampling techniques, electrocardiograms and basic life support skills. Clinical Practice/Practicum 12 hours. Prerequisites: Admission into the Respiratory Care Clinical Training Program and departmental permission. Will not satisfy general education science requirements. (Spring)

RESP 2200 RESPIRATORY CARE RECITATION II *0 credit hours* Review and Integrated discussion of information presented in lecture, labs, and clinical experiences during semester two of the clinical training program. Lecture/discussion 0 hours. Prerequisites: RESP 2100, RESP 2113, RESP 2123, RESP 2133, RESP 2143, RESP 2153, and RESP 2161. Will not satisfy general education science requirements. (Fall)

RESP 2213 RESPIRATORY THERAPY PROCEDURES II *3 credit hours* Continuation of Respiratory Therapy Procedures I. Covers arterial and capillary blood gas sampling techniques and analysis, arterial line insertions, electrocardiograms, capnography, transcutaneous O2/CO2 monitoring, apnea monitoring, defibrillators, bronchial hygiene, airway management, endotracheal intubation and extubation, pulmonary rehabilitation and home care. Lecture 2 hours, laboratory 2 hours. Prerequisites: RESP 2100, RESP 2113, RESP 2123, RESP 2133, RESP 2143, RESP 2153, and RESP 2161. Successful completion of program first semester. Corequisite: RESP 2213L. Will not satisfy general education science requirements. (Fall)

RESP 2213L RESPIRATORY THERAPY PROCEDURES II LAB *3 credit hours* LAB: Continuation of Respiratory Therapy Procedures I. Covers arterial and capillary blood gas sampling techniques and analysis, arterial line insertions, electrocardiograms, capnography,

transcutaneous O2/CO2 monitoring, apnea monitoring, defibrillators, bronchial hygiene, airway management, endotracheal intubation and extubation, pulmonary rehabilitation and home care. Lecture 2 hours, laboratory 2 hours. Prerequisites: RESP 2100, RESP 2113, RESP 2123, RESP 2133, RESP 2143, RESP 2153, and RESP 2161. Successful completion of program first semester. Corequisite: RESP 2213. Will not satisfy general education science requirements. (Fall)

RESP 2222 RESPIRATORY CLINICAL PRACTICE II *2 credit hours* Continuation of clinical experience practiced with basic assessment and respiratory therapy modalities. Course includes 165 contact hours of clinical experience. Clinical practice is coordinated to cover adult and pediatric basic assessment, respiratory therapies, blood gas sampling techniques, electrocardiograms, and basic life support skills. Clinical Practice/Practicum 11 hours. Prerequisites: RESP 2100, RESP 2113, RESP 2123, RESP 2133, RESP 2143, RESP 2153, and RESP 2161. Successful completion of program first semester. Will not satisfy general education science requirements (Fall).

RESP 2233 CRITICAL CARE *3 credit hours* Survey of procedures and principles of diagnosis and management critically ill patients, physical assessment, psychological aspects, fluid and electrolyte balance, clinical laboratory studies, nutrition, and hemodynamic monitoring. Lecture 3 hours. Prerequisites: RESP 2100, RESP 2113, RESP 2123, RESP 2133, RESP 2143, RESP 2153, and RESP 2161. Successful completion of program first semester. Will not satisfy general education science requirements. (Fall)

RESP 2242 PEDIATRIC RESPIRATORY CARE *2 credit hours* Introductory concepts of disease states specific to neonatal and pediatric patients including equipment and theory necessary for providing respiratory care, mechanical ventilation, evidence-based practice guidelines, and developmental outcomes. Lecture 2 hours. Prerequisites: RESP 2100, RESP 2113, RESP 2123, RESP 2133, RESP 2143, RESP 2153, and RESP 2161. Successful completion of program first semester. Will not satisfy general education science requirements. (Fall)

RESP 2253 MECHANICAL VENTILATION *3 credit hours* Principles of mechanical ventilation and psychological effects of positive pressure ventilation. Includes different types of ventilation, operating modes, initiation and monitoring of mechanical ventilation, interpreting waveforms, patient management, evidence-based guidelines, and weaning. Lecture 2 hours, laboratory 2 hours. Prerequisites: RESP 2100, RESP 2113, RESP 2123, RESP 2133, RESP 2143, RESP 2153, and RESP 2161. Successful completion of program first semester. Corequisite: RESP 2253L. Will not satisfy general education science requirements. (Fall)

RESP 2253L MECHANICAL VENTILATION LAB *0 credit hours* LAB: Principles of mechanical ventilation and psychological effects of positive pressure ventilation. Includes different types of ventilation, operating modes, initiation and monitoring of mechanical ventilation, interpreting waveforms, patient management, evidence-based guidelines, and weaning. Lecture 2 hours, laboratory 2 hours. Prerequisites: RESP 2100, RESP 2113, RESP 2123, RESP 2133, RESP 2143, RESP 2153, and RESP 2161. Successful completion of program first semester. Corequisite: RESP 2253. Will not satisfy general education science requirements. (Fall)

RESP 2313 RESPIRATORY CLINICAL PRACTICE III *3 credit hours* Continuation of clinical experience with intensive care involvement. Course includes 247.5 contact hours of clinical experience. Clinical practice is coordinated to cover adult, pediatric, and neonatal critical care, advanced airway care, mechanical ventilation, blood gas sampling techniques, and analysis and critical care monitoring. Clinical Practice/Practicum 31 hours. Prerequisites: RESP 2100, RESP 2113, RESP 2123, RESP 2133, RESP 2143, RESP 2153, and RESP 2161. Successful completion of program first semester. Will not satisfy general education science requirements. (Summer)

RESP 2411 NBRC TEST PREPARATION *1 credit hour* A comprehensive overview of all concepts learned throughout the Respiratory Care program. This online course will review key concepts and prepare students to take the National Board of Respiratory Care's Therapist Multiple Choice Examination and Clinical Simulation Examination to obtain licensure required to practice as a Registered Respiratory Therapist. Comprehensive online mock exams will cover general patient care, bedside patient assessment, therapeutic procedures and modalities, mechanical ventilation, pathology, pulmonary function testing, special procedures, and respiratory calculations. Lecture, 1 hour. Admission into the Respiratory Care Clinical Training Program and departmental permission. Will not satisfy general education science requirements. (Spring)

RESP 2414 RESPIRATORY CLINICAL PRACTICE IV *4 credit hours* Continuation of clinical experience with intensive care involvement. Course includes 330 contact hours of clinical experience. Clinical practice is coordinated to cover adult, pediatric, and neonatal critical care, advanced airway care, mechanical ventilation, blood gas sampling techniques, and analysis and critical care monitoring. Clinical Practice/Practicum 22 hours. Prerequisite: RESP 2313. Will not satisfy general education science requirements. (Spring)

ROMANIAN (ROMN)

Communication, English, and Foreign Languages

ROMN 4153* INTENSIVE STUDIES IN ROMANIAN *3 credit hours* An intensive introductory study of Romanian combining guided independent study of the written language with regular oral practice of the spoken language. Two hours independent study, one-hour lab. Prerequisites: ENGL 1213 and six hours study of another Romance language or permission of the department.

ROMN 4961-3* DIRECTED READINGS IN ROMANIAN *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: ROMN 4153.

RUSSIAN (RUSN)

Communication, English, and Foreign Languages

RUSN 1113* BEGINNING RUSSIAN I *3 credit hours* An introductory course in the language and culture of the Russian Federation. Lecture 3 hours. General Education, Humanities–Diversity.

RUSN 1223* BEGINNING RUSSIAN II *3 credit hours* Continuation of RUSN 1113. Lecture 3 hours. Prerequisite: RUSN 1113 or equivalent. General Education, Humanities–Diversity.

RUSN 4961-3* DIRECTED READINGS IN RUSSIAN *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: RUSN 1223 or equivalent.

SOCIOLOGY (SOCI)

Social Sciences

SOCI 1113* INTRODUCTION TO SOCIOLOGY *3 credit hours* A survey of the fundamental concepts and scope of sociology focusing on the understanding of human behavior and social organization. Topics include the sociological perspective, culture, social interaction, social inequality, social institutions, and social change. Lecture 3 hours. General Education, Behavioral Science. (Fall, Spring)

SOCI 2023* SOCIAL PROBLEMS *3 credit hours* An overview of the subjective and objective aspects of social problems. Topics include: poverty, various forms of inequality, population, work, crime, substance abuse, health, education, and the environment. Lecture 3 hours.

SOCI 2513* INTRODUCTION TO SOCIAL WORK *3 credit hours* An overview and history of the profession of social work. Topics include a survey of social work values and professional ethics, in addition to the history of social welfare and human services policy in the U.S. Lecture 3 hours. Prerequisite: None.

3003* DEVIANT BEHAVIOR *3 credit hours* The course consists of an overview of sociological theories of deviant behavior, along with a discussion of various types of deviant behavior, including violent and property crime, mental illness, diverse lifestyles, substance use and abuse, and white-collar/corporate crime. Lecture 3 hours. Prerequisite: SOCI 1113.

SOCI 3013* RACE AND ETHNIC RELATIONS *3 credit hours* An examination of the historical, political, economic, and sociological dynamics of race and ethnic relations in the United States. The course includes an emphasis on how race and ethnicity are created and re-created in society, particularly by culture and social institutions, and the manner in which these processes create and perpetuate social inequality. Lecture 3 hours. Prerequisite: Must be ENGL 1113 eligible (i.e., have no English deficiencies). General Education, Humanities-Diversity.

SOCI 3113* SOCIAL STATISTICS *3 credit hours* An overview of descriptive and inferential statistics and their application in sociological research. Topics include: measures of central tendency and variability, probability, sampling distributions, Chi-square, correlation, and simple regression. Lecture 3 hours. Prerequisites: SOCI 1113 and STAT 1513 or MATH 1413 or higher. (Fall)

SOCI 3123* SOCIOLOGICAL THEORY *3 credit hours* A study of major explications on social conflict, change, integration, interaction, network, and modernity. Attention is given to general orientations and basic concepts underlying Marxism, critical theory, world-system theory, interactionism, ethnomethodology, and functionalism. The course stresses Marx, Weber, and Durkheim in relation to social criticism, social evolution, and social modernity respectively, on one hand and, on the other, their contemporary relevance and theoretical offshoots in the field. Lecture 3 hours. Prerequisite: SOCI 1113. (Spring, Odd Years)

SOCI 3133* SOCIOLOGICAL RESEARCH METHODS *3 credit hours* Introduction to the basic concepts of sociological research. Topics include research design, conceptualization and measurement, sampling, qualitative and quantitative data collection techniques, and analyses of data. Lecture 3 hours. Prerequisite: SOCI 1113. (Spring, Odd Years)

SOCI 3323* COLLECTIVE BEHAVIOR AND SOCIAL MOVEMENTS *3 credit hours* A study of the episodic and enduring collective actions through various research and perspectives on fad, riot, crowd, protest, public, and social movements. Attention is given to how collective actions unfold and how they are sustained in relation to emergence, participation, mobilization, organization, strategy, outcome, movement ideology, and social-political environments. The course stresses the questions that competing perspectives and different research ask about collective actions and characteristic ways that they try to answer them. Lecture 3 hours. Prerequisite: SOCI 1113.

SOCI 3343* POLITICAL SOCIOLOGY *3 credit hours* A study of politics as politicized everyday social world and as interrelated activities that shape and are shaped by established institutions. Attention is given to: (a) politics at the level of nation-states such as politics and religion, forms of political rule and authority, globalization and its political outcomes; (b) politics at the level of politicized social world such as contentious protests of historically marginalized minorities and the broadening of political arena toward the realm of culture and identity; and (c) corporate-class politics or the preponderant power of

corporate communities over policy issues. Lecture 3 hours. Prerequisite: SOCI 1113.

SOCI 3373* SOCIOLOGY OF THE COMMUNITY *3 credit hours* The community, its structure, systems and processes. This course covers the influence of geography, demography and patterns of settlement upon social life. Lecture 3 hours. Prerequisite: SOCI 1113.

SOCI 3403* SOCIOLOGY OF THE FAMILY *3 credit hours* This course introduces the student to a historical overview of the American family, along with the intersections of social class, gender, and race/ethnicity in family contexts. Topics include mate selection, connections between work and family life, marriage, parenting, divorce, stepfamilies, and violence in families. Lecture 3 hours. Prerequisite: SOCI 1113.

SOCI 3413* GERONTOLOGY *3 credit hours* An in-depth study of various aspects of aging from a broad interdisciplinary perspective. Lecture 3 hours. Prerequisite: SOCI 1113.

SOCI 3503* POPULAR CULTURE *3 credit hours* A study of culture as the mass production, circulation, and consumption of visual texts and behavioral practices in multiple forms. Attention is given to what forms of social life popular culture depicts, how it molds and fractures local cultures, how it solidifies group identities and blends individual differences, how it is incorporated into social criticisms of power and domination, what standardizations it creates, and what it reveals about class-gender-race relations. The course stresses interpretive analyses and theories advanced in the field. Lecture 3 hours. Prerequisite: SOCI 1113.

SOCI 3513* INTRODUCTION TO SOCIAL WELFARE AND HUMAN SERVICES *3 credit hours* An introduction to social welfare institutions, including the purposes, concepts, methods, and theories used in the delivery of human services. Lecture 3 hours. Prerequisite: SOCI 1113.

SOCI 3733* SOCIOLOGY OF GENDER *3 credit hours* 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.

SOCI 3853* SELECTED TOPICS IN SOCIOLOGY *3 credit hours* 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 3 hours. Prerequisites: SOCI 1113.

SOCI 3991-3 INTERNSHIP IN SOCIOLOGY *3 credit hours* 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 3 credit hours. Internship 1-3 hours. Prerequisites: Student must be a sociology major, have completed 12 credit hours of sociology coursework, and have junior standing.

SOCI 4003* CRIMINOLOGY *3 credit hours* This course introduces the student to the study of criminal behavior, including theoretical explanations of this behavior from a sociological perspective. Topics include: violent crime, property crime, occupational crime, corporate crime, and political crime. Lecture 3 hours. Prerequisites: SOCI 1113.

SOCI 4013* JUVENILE DELINQUENCY *3 credit hours* This course examines the trends and nature of delinquency in the U.S., with an emphasis on theoretical explanations of delinquency from a sociological perspective. Larger social contexts will also be considered, including the role of schools, peers, community, and the family. Aspects of the juvenile justice system in the U.S. will also be examined. Lecture 3 hours. Prerequisite: SOCI 1113.

SOCI 4103* SOCIOLOGY OF RELIGION *3 credit hours* A study of religion as a social institution organized into groups. Attention is given to social explanations of religious beliefs and rituals. The course stresses how the principles of group life impinge on religion, how conflict figures commonly in religious organization, what constitutes church-sect continuum, what differentiates denominations from "alternative" religions, how religion relates to race/ethnicity, class, politics, economy, social reproduction, and social change, and what explains secularization and fundamentalism. Lecture 3 hours. Prerequisites: SOCI 1113.

SOCI 4213* SOCIAL STRATIFICATION *3 credit hours* 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. (Spring, Even Years)

SOCI 4403* FAMILY VIOLENCE *3 credit hours* A sociological analysis of child abuse, intimate partner violence, and elder abuse, with an emphasis on causes and trends. Lecture 3 hours. Prerequisites: SOCI 1113.

SOCI 4491-3* INDEPENDENT STUDY *1-3 credit hours* Independent study of sociologically relevant topics not covered in current sociology courses. May be repeated with a different topic for a total of 3 credit hours. Independent Study 1-3 hours. Prerequisites: SOCI 1113, Junior standing, and Sociology major.

SOCI 4903* SOCIOLOGY CAPSTONE *3 credit hours* This course provides an overview of the major concepts in sociology with an emphasis on the integration of these concepts at an advanced level. This course will also cover career options and graduate education in sociology. Sociology program assessment is a component of the course. Sociology majors are required to take this course during their Senior year. Capstone 3 hours. Prerequisites: Student must be a sociology major, have taken SOCI 1113, SOCI 3113, SOCI 3133, and completed at least 18 credit hours of sociology coursework. (Spring, Even Years)

SOMALI (SMLI)

Communication, English, and Foreign Languages

SMLI 4153* INTENSIVE STUDIES IN SOMALI I *3 credit hours* An intensive introductory study of Somali

combining guided independent study of the written language with regular oral practice of the spoken language. Two hours independent study, one-hour lab. Prerequisites: ENGL 1213 and six hours study of another foreign language or permission of the department.

SMLI 4163* INTENSIVE STUDIES IN SOMALI II *3 credit hours* Continuation of SMLI 4153. Two hours independent study, one-hour lab. Prerequisite: SMLI 4153.

SPANISH (SPAN)

Communication, English, and Foreign Languages

SPAN 1113* BEGINNING SPANISH I *3 credit hours* An introductory course in the language and culture of Spanish-speaking countries. Lecture 3 hours. General Education, Humanities–Diversity. (Fall)

SPAN 1223* BEGINNING SPANISH II *3 credit hours* Continuation of SPAN 1113. Lecture 3 hours. Prerequisite: SPAN 1113 or equivalent. General Education, Humanities–Diversity. (Spring)

SPAN 2113* INTERMEDIATE SPANISH I *3 credit hours* 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. (Fall)

SPAN 2223* INTERMEDIATE SPANISH II *3 credit hours* Continuation of SPAN 2113. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 2113. (Spring)

SPAN 3113* SPANISH GRAMMAR AND LINGUISTICS *3 credit hours* 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.

SPAN 3123* SPANISH CONVERSATION *3 credit hours* Improving accent and rapidity of speech through speeches, presentations, impromptu dialogues. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 2223 or equivalent.

SPAN 3133* SPANISH CULTURE *3 credit hours* 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. Prerequisites: SPAN 3113 and SPAN 3123 or equivalent.

SPAN 3143* SPANISH COMPOSITION *3 credit hours* Cultivation of facility in writing Spanish. Planned and impromptu compositions. Lecture 3 hours. Prerequisites: SPAN 3113 and SPAN 3123 or equivalent.

SPAN 3213* ADVANCED SPANISH GRAMMAR AND LINGUISTICS *3 credit hours* 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.

SPAN 3223* ADVANCED SPANISH CONVERSATION *3 credit hours* 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.

SPAN 4113* LA HISTORIA DEL MUNDO HISPANICO *3 credit hours* 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.

SPAN 4123* ESPANA EN SU LITERATURA I *3 credit hours* 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 3143.

SPAN 4133* ESPANA EN SU LITERATURA II *3 credit hours* The study of the major literary works of Spain from the 18th Century to the present. Relationships between literature and society will also be examined. Conducted in Spanish. Lecture 3 hours. Prerequisite: SPAN 4123 or equivalent.

SPAN 4143* HISPANOAMERICA EN SU LITERATURA I *3 credit hours* 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 3143.

SPAN 4153* HISPANOAMERICA EN SU LITERATURA II *3 credit hours* 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.

SPAN 4163* SPANISH FOR BUSINESS AND INDUSTRY *3 credit hours* 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. Prerequisite: SPAN 3143.

SPAN 4961-3* DIRECTED READING IN SPANISH *1-3 credit hours* 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. Independent study/directed readings 1-3 hours. Prerequisite: SPAN 4143 or equivalent.

SPECIAL EDUCATION (SPED)

Education

SPED 2103 INCLUSIVE ENVIRONMENTS: EDUCATING EXCEPTIONAL CHILDREN *3 credit hours* A study of disability conditions, interventions, and instruction in inclusive environment; implications of environmental and cultural characteristics of the child, family, and

community; and collaborating with families and other professionals. Lecture 3 hours. (Spring)

SPED 3103* THE EXCEPTIONAL CHILD *3 credit hours* 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. Lecture 3 hours. Prerequisite or Concurrent Enrollment: EDUC 3733 or PSY 3353.

SPED 3203 CHARACTERISTICS OF EXCEPTIONAL CHILDREN
3 credit hours A comprehensive overview of the characteristics of all exceptional children (Mild-Moderate and Severe-Profound/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. Lecture 3 hours.

SPED 3243 BEHAVIOR INTERVENTION AND MANAGEMENT *3 credit hours* 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. Lecture 3 hours.

SPED 3803 SPECIAL TOPICS IN SPECIAL EDUCATION *3 credit hours* Topics of special interest in special education. May be repeated once with a change of topic. Prerequisite: Department permission. Lecture 3 hours.

SPED 3821-3 WORKSHOP IN SPECIAL EDUCATION *1-3 credit hours* 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. Lecture 1-3 hours. Prerequisites: Junior standing and department permission.

SPED 4223 ASSESSMENT AND EVALUATION IN SPECIAL EDUCATION *3 credit hours* 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). Lecture 3 hours.

SPED 4263 FOUNDATIONS OF SPECIAL EDUCATION *3 credit hours* 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. Lecture 3 hours.

SPED 4413 TEACHING STUDENTS WITH MILD/MODERATE DISABILITIES *3 credit hours* 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 devices. The course also equips participants with skills needed for instructional programming and improving behavior for students who are behaviorally challenged. Also requires a 4-hour field component. Lecture 3 hours.

SPORTS AND EXERCISE SCIENCE (SES)

Sports and Exercise Science

SES 2003* HEALTH *3 credit hours* Active process of becoming aware of and making choices that lead to improved health outcomes. Lecture 3 hours. General Education, Health and Wellness.

SES 2013* WELLNESS *3 credit hours* Active process of becoming aware of and making choices that lead to improved exercise outcomes. A physical activity component is required. A medical release is required for students who may need accommodations due to a medical condition. Lecture 3 hours. General Education, Health and Wellness.

SES 2023* NUTRITION *3 credit hours* Active process of becoming aware of and making choices that lead to improved dietary outcomes. Lecture 3 hours. General Education, Health and Wellness. (Fall, Spring)

SES 2033 FIRST AID *3 credit hours* Respond to life-threatening emergencies in multiple populations and provide life-saving interventions until emergency medical services arrive. (Optional certification in First Aid, CPR and AED). Lecture 3 hours. (Fall, Spring)

SES 2043 INTRODUCTION TO SPORTS AND EXERCISE SCIENCE *3 credit hours* Examine basic terms, current trends, career pathways and potential employment opportunities in the field. Lecture 3 hours. (Recommended for Freshman and Sophomore SES majors.) (Fall, Spring)

SES 3003* SPORTS NUTRITION *3 credit hours* Examine energy needs for various levels of physical activity and effect of dietary intake on performance. Lecture 3 hours. Prerequisite: SES 2023. (Fall, Spring)

SES 3013* APPLIED ANATOMY AND KINESIOLOGY *3 credit hours* Examine musculoskeletal anatomy as it applies to simple and complex motor tasks and proper execution of joint movement during common exercises. (May not be used as a Biology course.) Lecture 3 hours. (Fall, Spring)

SES 3023 CARE AND PREVENTION OF ATHLETIC INJURIES *3 credit hours* Examine preventative measures and practice proper treatment of specific sports injuries resulting from activities in the home, recreational, intramural and extramural settings. Lecture 3 hours. (Fall, Spring)

SES 3033* PHYSIOLOGY OF EXERCISE *3 credit hours* Examine how the body, from a functional standpoint, responds, adjusts and adapts to exercise. Lecture 3 hours. Prerequisite: SES 3023. (Fall, Spring)

SES 3043* BIOMECHANICS *3 credit hours* Analyze how external forces interact with internal forces to control

human motion. Lecture 3 hours. Prerequisite: SES 3013. (Fall, Spring)

SES 3053 FACILITY MANAGEMENT *3 credit hours* Examine principles of business that support the operation of physical activity programs. Lecture 3 hours. Prerequisite: SES 3023. (Fall, Spring)

SES 3063* HEALTH COACHING *3 credit hours* Apply behavior modification strategies to help guide and support individuals in making sustainable lifestyle changes that lead to improved health outcomes. Lecture 3 hours. Prerequisite: SES 2013.

SES 3073 RECREATION FOR SPECIAL POPULATIONS *3 credit hours* Programming of recreational activities for special populations. Lecture 3 hours. Prerequisite: SES 2013.

SES 3083 COMMUNITY RECREATION PROGRAMS *3 credit hours* Examine supervisory role of various recreational programs with emphasis in leadership, program planning, budgeting, managerial techniques, and environmental awareness. Lecture 3 hours. Prerequisite: SES 2043.

SES 3093* GENERAL MEDICAL CONDITIONS *3 credit hours* Examine the pharmacological, behavioral and psychological effects of some of the most commonly used legal and illegal drugs in modern society. Lecture 3 hours. Prerequisite: SES 2003.

SES 3103 LEADERSHIP AND COACHING *3 credit hours* Develop individual skills in the practice of coaching as well as a broad understanding of leadership within the larger context of organizational performance and change. Lecture 3 hours. Prerequisite: SES 2043.

SES 3113 EVENT PLANNING AND FUNDRAISING *3 credit hours* Planning and management of special events. Overview of fundraising components and operation, as well as guidelines to implement and manage effective sports related events. Lecture 3 hours. Prerequisite: SES 2043.

SES 3123* SPORT PSYCHOLOGY *3 credit hours* Explore the psychological factors involved in sport and physical activity with an emphasis on performance enhancement. Lecture 3 hours. Prerequisite: SES 2003.

SES 3131-3 SPECIAL STUDIES *1-3 credit hours* Special studies courses, of one to three credits, that are designed to give variety to the present curriculum or educational activities under the direct supervision of a faculty member. Up to 12 hours of special studies courses may be applied to a student's program. (A special studies course may be repeated if a different topic is offered.) Independent study, 1-3 hours. Prerequisite: SES 3023.

SES 3143 PERSONAL TRAINING *3 credit hours* Examine training principles and develop appropriate exercise plan based on the goals, indications, contraindications, and physical evaluation of the individual. Lecture 3 hours. Prerequisite: SES 3033.

SES 3153 STRENGTH TRAINING *3 credit hours* Examine and apply the proper strength training and conditioning exercises for the athletic or sedentary populations. Lecture 3 hours. Prerequisite: SES 3033.

SES 4003 MOTOR LEARNING *3 credit hours* Examine variables that affect the learning processes associated with the acquisition and performance of motor skills. Lecture 3 hours. Prerequisite: SES 3043. (Fall, Spring)

SES 4013 PHYSIOLOGY OF EXERCISE LAB *3 credit hours* Apply practical skills and cutting-edge technologies to evaluate the effects of exercise and physical activity on health. Lecture 3 hours. Prerequisite: SES 3033. (Fall, Spring)

SES 4023 EXERCISE PRESCRIPTION *3 credit hours* Examine and apply principles used in exercise testing and prescription for normal healthy individuals and special populations. Lecture 3 hours. Prerequisite: SES 4013. (Fall, Spring)

SES 4033 LEGAL ASPECTS *3 credit hours* Examine legal and social policy issues most often encountered in sport and physical activity. Lecture 3 hours. Prerequisite: SES 3023. (Fall, Spring)

SES 4043 RESEARCH METHODS *3 credit hours* Analyze scientific literature and apply appropriate methods for reading, presenting, and interpreting data involved in research design. Lecture 3 hours. Prerequisite: SES 3043. (Fall, Spring)

SES 4053 PRACTICUM *3 credit hours* Intensive, senior-level work experience at an approved internship site while under the direction of a qualified site supervisor. Workshop and practicum component is required. Internship/Capstone 3 hours. Prerequisites: SES 2033 and completion of or concurrent enrollment in SES 4013 and SES 4023 and SES 4043. (Fall, Spring)

STATISTICS (STAT)

Computing and Mathematical Sciences

STAT 0152 SUPPLEMENTAL INTRODUCTION TO STATISTICS INSTRUCTION *Developmental course, no credit* Remediation and support for students who are enrolled in STAT 1513, but whose test scores and prior coursework do not indicate preparedness for college-level mathematics classes. Recommended for students enrolled in STAT 1513 who score less than 19 on the ACT Mathematics test and have not completed MATH 0213. Does not satisfy major requirements for any degree program at Cameron University. Lecture 2 hours. Prerequisite: MATH 0103 or satisfactory placement score. Corequisite: STAT 1513.

STAT 1513* INTRODUCTION TO STATISTICS *3 credit hours* An introductory course in the techniques of experimental statistics including estimation and hypothesis testing. Does not apply towards a major or minor in mathematics or a major in mathematics education. Lecture 3 hours. Prerequisite: MATH 0213 or 0115 or equivalent. General Education, Mathematics.

STAT 2013* INTRODUCTORY PROBABILITY AND STATISTICS I *3 credit hours* 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 1413 or higher. (Spring)

STAT 2023 INTRODUCTORY PROBABILITY AND STATISTICS II *3 credit hours* A continuation of STAT 2013. 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 2013 or departmental permission.

STAT 2613 BUSINESS STATISTICS *3 credit hours* An introduction to quantitative tools used in business analysis. Measures of central tendency, distributions, regression and correlation, and statistical inference, including confidence intervals and test of hypothesis are covered. Business applications will be emphasized. Lecture 3 hours. Prerequisite: MATH 1463 or higher. (Fall, Spring)

STAT 3113 MATHEMATICAL STATISTICS I *3 credit hours* 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.

STAT 3123 MATHEMATICAL STATISTICS II *3 credit hours* A continuation of STAT 3113. Sampling, interval estimation, tests of hypotheses, and regression and correlation. Lecture 3 hours. Prerequisite: STAT 3113.

SWAHILI (SWLI)

Communication, English, and Foreign Languages

SWLI 1113* BEGINNING SWAHILI I *3 credit hours* An introductory course in the major language and the cultures of East Africa. Lecture 3 hours. General Education, Humanities–Diversity.

SWLI 1223* BEGINNING SWAHILI II *3 credit hours* Continuation of SWLI 1113. Lecture 3 hours. Prerequisite: SWLI 1113 or equivalent. General Education, Humanities–Diversity.

TECHNOLOGY (TECH)

Computing and Mathematical Sciences

TECH 4443 TECHNOLOGY CAPSTONE *3 credit hours* A culminating experience based on previous required major TECH coursework. Students will work individually and in teams to analyze technology issues through research and application. Capstone/lecture 3 hours. Prerequisite: IT 3013; Prerequisite or Concurrent Enrollment: IT 4033 and IT 4143.

THEATRE ARTS (THTR)

Art, Music, and Theatre Arts

THTR 1001 THEATRE PRACTICUM *1 credit hour* 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. Practicum 1 hour. (Fall, Spring)

THTR 1103* INTRODUCTION TO THEATRE *3 credit hours* 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. General Education, Humanities–Aesthetics. (Fall, Spring)

THTR 1133* VOICE AND DICTION *3 credit hours* A general study of the structure of the vocal mechanism; principles of vocal quality, articulation, and pronunciation. Lecture 3 hours.

THTR 1203* TECHNICAL PRODUCTION *3 credit hours* 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 concurrently enrolled in THTR 1103. (Fall, Even Years)

THTR 1503* MAKE-UP *3 credit hours* Principles and practice of application of stage make-up; corrective, character, old age, likeness, and fantasy. Lecture 2 hours, laboratory 2 hours.

THTR 1603 STAGE MOVEMENT *3 credit hours* 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.

THTR 1901-3 THEATRE LAB *1-3 credit hours* Open to all University students. Laboratory experience in performance, technical production, and management. Arranged around the student's schedule. May be repeated for credit. Laboratory 1-3 hours. Permission of instructor.

THTR 2203* STAGECRAFT *3 credit hours* 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.

THTR 2403 STAGE MANAGEMENT *3 credit hours* The techniques of production stage management, including preparing the prompt script, rehearsal procedures, organizing the technical elements, cueing and running the performance. Lecture 3 hours. (Fall, Even Years)

THTR 2503* COSTUME TECHNIQUES *3 credit hours* 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.

THTR 2603* ACTING I *3 credit hours* Development of basic acting skills including self-awareness, movement, verbal and non-verbal communication, improvisation and working within an ensemble. Lecture 2 hours, laboratory 2 hours. Prerequisite: THTR 1103 or concurrently enrolled in THTR 1103. (Fall, Even Years)

THTR 3303* LIGHTING *3 credit hours* 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.

THTR 3403* DIRECTING *3 credit hours* 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. (Spring, Even Years)

THTR 3603*ACTING II *3 credit hours* 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.

THTR 3703* AUDIO *3 credit hours* 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.

THTR 3803* THEATRE AND DRAMA: THE BEGINNINGS *3 credit hours* 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. (Fall, Even Years)

THTR 3813* THEATRE AND DRAMA: THE RENAISSANCE *3 credit hours* 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. (Spring, Odd Years)

THTR 3823* THEATRE AND DRAMA: THE 18th AND 19th CENTURIES *3 credit hours* A study of the evolution of drama, theatre architecture, technical theatre, acting, and directing from 1660 England to the birth of realism. Lecture 3 hours. (Fall, Odd Years)

THTR 3833* THEATRE AND DRAMA: THE 20th AND 21st CENTURIES AND CHINA *3 credit hours* A study of the evolution of drama, theatre architecture, technical theatre, acting, and directing in the 20th and 21st Centuries, including an overview of China. Lecture 3 hours. (Spring, Even Years)

THTR 3901-3 WORKSHOP *1-3 credit hours* 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.

THTR 4203* SCENE DESIGN *3 credit hours* 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.

THTR 4303* LIGHTING DESIGN *3 credit hours* 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.

THTR 4503* COSTUME DESIGN *3 credit hours* 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.

THTR 4603* ACTING III: PERIOD STYLES *3 credit hours* 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.

THTR 4901-3 INDEPENDENT STUDY *1-3 credit hours* An individual study course of advanced nature. Subject matters vary with background and interest of student. Independent study 1-3 hours. Prerequisite: Permission of department. May be repeated for credit.

THTR 4911-3 SEMINAR *1-3 credit hours* Concentrated investigation of specific problems and/or areas in theatre. Seminar 1-3 hours. Prerequisite: Permission of department. May be repeated for credit.

THTR 4921-8 INTERNSHIP *1-8 credit hours* 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. Internship 1-8 hours.

THTR 4993 THEATRE ARTS CAPSTONE *3 credit hours* A reflection on the skills and knowledge at the culmination of Theatre Arts studies. The student will complete in-depth research and analysis in order to realize a project in the production program. In addition, the student will document their progress of collaboration and artistic choices. As part of this process, the student will finalize their portfolio(s) which should be at the level to be submitted to graduate school and/or as a working professional. The student will also make an oral presentation of their portfolio and an oral defense of their project. Capstone/lecture 3 hours. Prerequisite: Senior standing. (Fall)

TURKISH (TURK)

Communication, English, and Foreign Languages

TURK 4153* INTENSIVE STUDIES IN TURKISH I *3 credit hours* An intensive introductory study of Turkish combining guided independent study of the written language with regular oral practice of the spoken language. Two hours independent study, one-hour lab. Prerequisites: ENGL 1213 and six hours study of another foreign language or permission of the department.

TURK 4163* INTENSIVE STUDIES IN TURKISH II *3 credit hours* Continuation of TURK 4153. Two hours independent study, one-hour lab. Prerequisite: TURK 4153.

UNIVERSITY (UNIV)

Psychology

UNIV 1001 INTRODUCTION TO UNIVERSITY LIFE. 1 credit hour. 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; and development of a student's academic plan are covered. Resources, decision making, and time management are also stressed. Restricted to those students required to take the course. Lecture 1 hour.

UNIVERSITY (UNIV)

Teaching and Learning

UNIV 1000 ORIENTATION *0 credit hours* 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. Lecture 2 hours.

UNIV 1011 CAREER DEVELOPMENT *1 credit hour* 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.

UNIV 2211-5 SPECIAL STUDIES *1-5 credit hours* A study of special lower-division areas or problems. Individual course offerings will vary from department to department. Independent study/directed readings 1-5 hours.

UNIV 2543 IDS AS CAPSTONE EXPERIENCE *3 credit hours* This course provides students with an opportunity to integrate concepts and theories learned through studies in their designated concentrations. Students will select a faculty advisor from each of the student's designated areas of concentration (approved by the chairs of each impacted department), and will work with the advisors to design and implement capstone projects related to the concentrations, culminating in written reports, oral presentations and a degree achievement portfolio. Emphasis is on critical thinking and analysis, and decision making in an interdisciplinary environment. This course normally must be taken in the student's final enrollment period. Independent study/directed readings 3 hours. (Spring)

UNIV 3001 JOB SEEKER SKILLS *1 credit hour* 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.

UNIV 3211-3 OSLEP *1-3 credit hours* OSLEP classes are an intensive study of creative, innovative, and contemporary problems or issues focusing on the theoretical and practical understanding of phenomena across the humanities, social sciences, and sciences. Designed as seminars that focus on different topics, OSLEP classes emphasize advanced reading and writing assignments. Readings and design of assignments are determined by the faculty resource person. The faculty resource person directs student preparation, evaluates student performance (oral and written), and assigns grades. Prerequisite: Permission of CU OSLEP Coordinator.

UNIV 4211-5 SPECIAL STUDIES *1-5 credit hours* An intensive study of special upper division areas or problems. Individual course offerings will vary by department. Independent study/directed readings 1-5 hours.

UNIV 4543 IDS BS CAPSTONE EXPERIENCE *3 credit hours* This course provides students with an opportunity to integrate concepts and theories learned through studies in their designated concentrations. Students will select a faculty advisor from each of the student's designated areas of concentration (approved by the chairs of each impacted department), and will work with the advisors to design and implement capstone projects related to the concentrations, culminating in written reports, oral presentations and a degree achievement portfolio. Emphasis is on critical thinking and analysis, and decision making in an interdisciplinary environment. This course normally must be taken in the student's final enrollment period. Independent study/directed readings 3 hours. (Spring)

UNIV 4593 STUDY ABROAD *3 credit hours* This course is designed to allow students to learn about different countries across the world in terms of their culture, history, politics, and other country-specific characteristics and also experience these countries during study abroad opportunities. Lecture/field experience 3 hours. Prerequisite: Departmental Permission.

*Liberal arts and sciences course.

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FACULTY AND ADMINISTRATIVE STAFF

ACREE, TIERA (2021) *Open Doors, College Preparation Advisor*, B.F.A., Cameron University.

ALAM, HASIBUL (2024) *Computing and Mathematical Sciences*, B.S., Daffodil International University, Bangladesh; M.S., Jahangirnagar University, Bangladesh; M.S., The University of Texas-Rio Grande Valley.

ANDERSON MAJORS, TYLER (2024) *Student Housing and Residence Life, Director*, B.A., University of North Texas; M.S., Lebanon Valley College.

ARGYROS, IOANNIS K. (1990) *Computing and Mathematical Sciences,* B.Sc., University of Athens (Greece); M.Sc., Ph.D., University of Georgia.

ARNOLD, THOMAS (2018) *University Farm, Farm Operator*, A.A.S., B.S., Cameron University; CLEET Certified.

BAJRACHARYA, AYUSHON (2024) *Information Technology Services, Analyst/Programmer*. A.S., Richland College; B.S. Cameron University.

BAKER, ALBERT (2018) *Engineering Services, Physical Plant Engineer*.

BARNES, BRANDON (2020) *Library, Circulation Supervisor*, B.A., Cameron University.

BERG, ALEX (2019) *Information Technology Services, Database Administrator*, A.A.S., B.S., Cameron University.

BISCETTE, ALDRICK (2016) *Information Technology Services, Assistant Systems Administrator*, B.A., Cameron University.

BOST, JASON (2025) *Business and Finance, Environmental Health and Safety Officer*, B.S., Illinois State University.

BRIGGS, TERESA (2006) *Enrollment Management, Assistant to the Vice President for Enrollment Management*.

BROWN, JARROD (2017) *Cameron-University Duncan, Tutor/Testing Coordinator*, B.A., B.S., Cameron University.

BRUE, KRYSTAL (2013) *Chair, Business*, B.A., B.B.A., M.A., Abilene Christian University; Ph.D., Northcentral University.

BUBLITZ, DAVID (2013) *Communication, English, and Foreign Languages*, B.A., B.A., M.Ed., Cameron University, M.F.A., Oklahoma City University.

BUSSEY, SANDRA (2014) *Academic Affairs, Academic Affairs Specialist*.

CARNEY, WILLIAM (2007) *Communication, English, and Foreign Languages,* B.A., M.A., University of Texas at San Antonio; M.S., Stevens Institute of Technology; Ph.D., Texas Tech University.

CASTRICONE, BENJAMIN (2018) *Academic Advising Center, High School Liaison*, A.A.S, B.S., Cameron University.

CASTRICONE, JENNIFER (2005) *Admissions, Admissions Coordinator,* B.A., Cameron University.

CATTERALL, DOUGLAS (2000) *Social Sciences,* B.A., University of Pennsylvania; Ph.D., University of Minnesota.

CHAFFINS, LEAH (2014) *Communication, English, and Foreign Languages*, B.A., Cameron University; M.F.A., Oklahoma City University.

CHAMBERS, TYSON (2013) *Sports and Exercise Science*, B.S., Southwest Oklahoma State University; M.Ed., M.S., Eastern New Mexico University, Ed.D., United States Sports Academy.

CHAPMAN, JOY (2015) *KCCU, Underwriting Director*.

CHILDS, TRAVIS (2008) *Social Sciences,* B.A., Midwestern State University; M.A., University of Texas at Arlington; Ph.D. Candidate, Texas Tech University.

CHRISTENSEN, SHARON (1998) *Computing and Mathematical Sciences,* B.A., B.S., M.S., Cameron University.

CLOPTON, DONNA (2005) *Communication, English, and Foreign Languages*, B.A., University of Texas; M.A., University of Kentucky.

COBB, JADE (2023) *Library, Library Specialist*. B.A., Cameron University.

COFFMAN, KEVIN (2024) *Cameron-University Duncan, Academic and Financial Assistance Advisor*. B.B.A., Cameron University.

CONNICK, HANNAH (2021) *Admissions, Graduate and Transfer Admissions Counselor,* B.S., M.S., Cameron University.

COPONITI, MICHAEL "MICK' (2024) *B.S., University of Science and Arts of Oklahoma; M.B.A., Cameron University.*

COSTILLA, RICARDO (2002) *Administration and Supervision, Assistant Director.*

COTHREN, LESLIE (2013) *Student Services, Dean of Students,* B.S., Cameron University; M.Ed., University of Arkansas; Ph.D., Oklahoma State University.

CRAIG, TESSA (1993) *Student Wellness Center, Director*. B.B.A., Cameron University.

CRETACCI, MICHAEL (2023) *Social Sciences*, B.S., M.S., State University of New York College at Buffalo (SUNY); Ph.D., University of Albany.

CROUCH, JACK (2021) *Art, Music, and Theatre Arts*. M.F.A, Bradley University.

CUNNINGHAM, JOHN (2018) *Information Technology Services/Communication, English, and Foreign Languages, Help Desk Coordinator/eSports Coach,* B.S., Cameron University.

CUNNINGHAM, JULIA (2019) *Alumni Relations, Director*. B.A., Hiram College.

CUNNINGHAM, MANDY (2023) *Admissions, Lead Admissions Counselor*. M.A., Texas Women's University.

DALLY, BRENDA (1997) *Admissions, Director,* B.A., M.S., Cameron University.

DALMAN, AUTUMN (2025) *Sponsored Programs, Director*. B.A., University of Science and Arts of Oklahoma; M.H.R., University of Oklahoma.

DAVID, BETH (2015) *Registrar, Transfer Coordinator*, B.A., Bellevue University.

DAVIS-GRAY, TEMETRIUS (2017) *Open Doors, Assistant Director*, A.S., B.S., M.S., Cameron University.

DEBOARD, JOHN (2007) *Public Safety, Director*, Advanced CLEET Certification.

DELCAMP, SEAN (2011) *Chemistry, Physics, and Engineering, Storage/Wasteroom Coordinator*, B.S., Cameron University.

DENNIS, JENNIFER (2005) *Dean, School of Graduate and Professional Studies, and Dean, School of Arts and Sciences,* B.A., Cameron University; M.Ed., Southwestern Oklahoma State University; Ph.D., University of Oklahoma.

DILL, ROBERT S. (2017) *Information Technology Services, Systems Administrator*, A.A., A.S., Cuesta College; B.S., Cameron University.

DOAN, MARK (2017) *Information Technology Services, Assistant Network Administrator*, A.A.S., B.S., Cameron University.

DRISSI, JAWAD (2008) *Computing and Mathematical Sciences,* B.S., M.S., University of Grenoble, France; M.S., Ph.D., University of Montreal, Canada.

DUPLECHAIN, RACHEL (2025) *Open Doors, College Preparation Advisor*. B.S., Oklahoma Baptist University.

DURGIN, J.D. (2009) *Events and Activities, Events and Activities Coordinator*, B.S., M.S., Cameron University.

DUTTON, CATHLEEN (2017) *Student Support Services, Assistant Director*, B.S., M.S., Cameron University.

EBQA'AI, MOHAMMAD (2024) *Chemistry, Physics, and Engineering*, B.S., M.S., Jordan University of Science and Technology; Ph.D., Oklahoma State University.

ELROY, MICAH (2024) *Cameron-University-Duncan, Admissions/Academic Services Coordinator*. B.A., Cameron University.

ENGLEFIELD, EMMA (2024) *Development, Information Services Coordinator*. B.S., Cameron University.

EREMIA, BROOKE (2024) *Veteran's Affairs, Veteran's Certification Specialist*. B.S., Purdue University Global (Kaplan).

ESTEP, MICHAEL (2007) *Computing and Mathematical Sciences,* B.A., M.Tech., Southeastern Oklahoma State University; M.A. Berklee College of Music; M.S., Indiana University Purdue University Indianapolis; Ed.S., Ph.D., Nova Southeastern University.

EVANS, JENNIFER (2021) *Library, Director*, B.A., Midwestern State University; M.L.S., University of North Texas.

FAIN, DIANA (2017) *Financial Assistance, Coordinator Financial Assistance and Debt Management*, B.B.A., Cameron University.

FOLEY, BELINDA (2025) *Information Technology Services, Technician*. A.A.S., Cameron University; A.A., Western Oklahoma State College

FREDERICK, SARAH (2012) *Business Office, Accounts Receivable Supervisor*, B.S., Arkansas Tech University; B. Acct., Cameron University.

FRYE, CHARLES (2023) *Psychology*, B.A., B.S., Indiana University-Purdue University Indianapolis; Ph.D., Utah State University.

GARRETT, STACIE (2013) *Chair, Education*, B.A., Nevada State College at Henderson; M.Ed., Cameron University; Ed.D., Northcentral University.

GARRISON, KENSEY (2021) *Academic Advising Center, Acting Academic Services Director*, B.S., M.S., Cameron University.

GEIGER, JOHN (2001) *Psychology,* B.S., Northeast Missouri State University; M.A., Ph.D., Northern Illinois University.

GENTRY, OTIS (2014) *Campus Life, Aggie Rec Center Manager*, B.S., Cameron University.

GHALE, RAM (2013) *Information Technology Services*, *Systems Analyst/Programmer*, B.S., Cameron University.

GONZÁLEZ, JOSÉ ANTONIO (2015) *Communication, English, and Foreign Languages*, B.A., University of Oriente; M.A., University of Camagüey; Ph.D, Florida State University.

GREGORY, MARGOT (1996) *Sponsored Programs, Digital Access Coordinator,* A.A., Industrie and Handelskammer, Wuerzburg-Germany.

GRIFFIN, ASHRE (2011) *Information Technology Services, Network Administrator*, A.A.S, Hocking College; B.S., Cameron University.

GRIMMETT, NELSON (2024) *KCCU, Production Assistant*. A.A., University of Phoenix.

HACKER, TERRY (1984) *Maintenance Services, Carpenter Foreman*.

HALL, KATHRYN (2022) *Library, Librarian*. B.A., University of Tennessee; M.L.I.S., Valdosta State University.

HALL, RAMONA (2003) *Education,* B.S., University of Louisville; M.Ed., Northwestern State University; Ed.D., Tennessee State University.

HAMILTON, MARK (2017) *Communication, English, and Foreign Languages/Student Support Services*, *SSS Writing Lab Director*, B.A., University of Oklahoma; M.A., Indiana University.

HAMILTON, TIFFANY (2006) *Education, Teacher Certification Specialist*, A.S.; B.B.A, Cameron University.

HAMM, JOY (2025) *Vice President for Enrollment Management*, B.A., Lenoir-Rhyne University; M.A., University of North Carolina at Charlotte; Ed.D., Georgia State University.

HARDIN, KAREN (1996) *Business,* B.S., Dallas Baptist University; M.A., University of Dallas.

HELM, MITTIE (2024) *Business*, M.B.A., Chadron State College; Ph.D., National University.

HENSON, VICKI (1986) *Financial Assistance, Coordinator of Veterans Affairs,* A.S., Murray State College; B.S., M.S., Oklahoma State University.

HERRING, GREGORY J. (2007) *Computing and Mathematical Sciences,* B.S., Carroll College; Ph.D., University of Massachusetts-Amherst.

HINKLE, MYCA (2022) *Upward Bound, Assistant Director*, B.S., Harris-Stowe State University; M.A., Lincoln University.

HODGSON, JOHN (2000) *Communication, English, and Foreign Languages,* B.A., The Citadel; M.A., Florida Atlantic University; Ph.D., University of Oklahoma.

HOEPFNER, GREGORY (2001) *Art, Music, and Theatre Arts,* B.M., M.M., University of Central Oklahoma; D.M., University of Oklahoma.

HOLLEY, TAMMERA (2022) *Agriculture, Biology, and Health Sciences*, A.A.S, Western Oklahoma State University; B.S., Midwestern State University.

HOSKIN, MELVIN (2019) *Open Doors, College Preparation Advisor*, B.S., Cameron University.

HUGHES, BRYSON (2020) *Sports and Exercise Science*, B.S. Texas Tech University; M.S., Midwestern State University.

HUNT, C. SHANE (2025) *President*, B.B.A., M.B.A., University of Oklahoma; Ph.D., Oklahoma State University.

HUNT, ELIZABETH (2024) *Student Housing and Residence Life, Coordinator for Programming and Education*. A.A., Cuesta College; B.A., M.Ed., University of Oklahoma.

HUSAK, MANDY L. (2005) *Academic Affairs, Academic Affairs Coordinator*, B.S., Mississippi University for Women; M.S., Mississippi State University.

HUSAK, MICHAEL S. (2003) *Agriculture, Biology, and Health Sciences,* B.A., M.S., Angelo State University; Ph.D., Mississippi State University.

JAMES, PAUL (2019) *Psychology*, M.S., Southern Nazarene University; PhD., Oregon State University.

JANDA, LANCE (1999) *Chair, Social Sciences,* B.A., M.A., University of Central Oklahoma; Ph.D., University of Oklahoma.

JANDA, SARAH (2001) *Social Sciences,* B.A., M.A., Ph.D., University of Oklahoma.

JARMAN, KYLE (2015) *Cameron University-Duncan, Interim Director,* B.A., M.S., Oklahoma State University.

JAVED, MUHAMMAD (2010) *Chair, Computing and Mathematical Sciences,* B.S., University of Engineering and Technology, Pakistan; M.B.A., Oklahoma City University; M.S., Ph.D., University of Oklahoma.

JENKINS, MATTISON (1995) *Communication, English, and Foreign Languages,* B.S., Ohio University; M.S., Syracuse University; Ed.D., Delta State University.

JOHARI, ABBAS (1999) *Computing and Mathematical Sciences,* B.S., Metropolitan State College of Denver; M.Tech., Ph.D., Arizona State University.

KABIR, EHSANUL (2023) *Chemistry, Physics, and Engineering*, B.S., Bangladesh University of Engineering and Technology; M.S., Ph.D., Texas Tech University.

KAINE, DAVID (2023) *Human Resources, Director*. B.S., Cameron University.

KANE, LAURA (1988) *Business Office, Purchasing Agent,* B.B.A., Cameron University.

KELLER, CHRISTOPHER (2000) *Education,* B.A., M.A.T., Cameron University; Ph.D., University of Oklahoma.

KIMBERLING, HARRY W. (2018) *Computing and Mathematical Sciences*, A.A.S, B.S., Cameron University; M.S., Western Governors University.

KINDRED, JOHN (2017) *Public Affairs, Graphic Designer*, B.B.A., Cameron University.

KING, JAMES (2022) *Academic Advising Center, Advisement Specialist*, A.A.S, B.A., Cameron University.

KINGSLEY, MARGERY A. (1994) *Vice President for Academic Affairs*, A.B., Princeton; M.A., Ph.D., University of California at Los Angeles.

KOLL, AMANDA (2015) *Business Office, Controller*, B.Acct., Cameron University; B.B.A., University of Central Oklahoma; M.B.A., University of North Texas.

KRUSCAVAGE, AMY (2017) *Admissions, Admissions Coordinator*, B.A., Cameron University.

KUEHNE, BRANDON (2022) *Agriculture, Biology, and Health Sciences*, A.A.S., California College of Health Sciences; B.S., Marshall University; M.B.A., D.H.A, Franklin University.

LANE, BREANNA (2024) *Admissions, Admissions Counselor*. B.A., Cameron University.

LARSEN, STACIE (2019) *Registrar, Transfer Coordinator*, B.A., M.S., Cameron University.

LEAL, MICHAEL (2018) *KCCU, Director of Broadcasting*. M.A., University of Oklahoma.

LEE, DANYELLE (2016) *Agriculture, Biology, and Health Sciences*, B.S., Angelo State University; M.S., Angelo State University; Ph.D., Oklahoma State University.

LEE, SU HO (2001) *Social Sciences,* B.A., M.A., University of California-Berkeley; Ph.D., University of Kansas.

LI, HONG (2009) *Computing and Mathematical Sciences,* B.S., Beijing Union University; M.S., Michigan Technological University; Ph.D., Bowling Green State University.

LI, GRACE (2021) *Institutional Effectiveness, Research and Data Analyst*, A.A.S, B.S., Cameron University.

LINDSEY, TRACY (2021) *Registrar, Records Manager*, A.S., B.Acct., B.B.A., Cameron University.

LIU, YINGQIN (2008) *Communication, English, and Foreign Languages,* B.A., Xi'an Foreign Languages University; M.A., Western Kentucky University; Ph.D., Texas Tech University.

LITTLE, J.D. (2017) *Art, Music, and Theatre Arts*, D.M.A., University of Colorado-Boulder.

LONG, ROGER (1994) *Transportation Services, Transportation Foreman.*

LONZANIDA, BERNADETTE D. (2000) *Business*, B.S.C. Accounting, Saint Mary's University; C.P.A.; M.B.A., Cameron University.

LOOI, ELENE (2024) *Institutional Effectiveness, Director*. B.A., Bemidji State University; M.A., University of Northern Iowa.

LOWE, RICK (2013) *Social Sciences*, A.A.S., B.S., Cameron University; M.A., Oklahoma City University.

MAHLOCK, KRIS (2016) *Chair, Sports and Exercise Science*, B.S., Southwestern Oklahoma State University; M.S., Eastern New Mexico University; Ed.D., Capella University.

MANNING, JERRI (2024) *Education, Field Experience Specialist*. B.S., University of Oklahoma.

MARRERO, ALIJAH (2024) *Information Technology Services, Technician*. A.A.S., Rose State College; B.S., Cameron University.

MASTERS, J. KEN (2006) *Business,* B.A., Louisiana State University; M.B.A., McNeese State University; Ph.D., University of North Texas.

McANERNEY, PATRICK (2021) *Agriculture, Biology, and Health Sciences*, B.S., Cameron University; M.S., University of South Alabama.

McAVOY, STEFANY (2025) *Computing and Mathematical Sciences*, B.S., Colorado School of Mines; M.Ed., Cameron University.

McCABE, NATALIE (2021) *Art, Music, and Theatre Arts*. B.A., Pennsylvania State University; M.A., Catholic University of America; Ph.D., University of Missouri-Columbia.

McCLURE, KELLY (2004) *Information Technology Services, Director of Information Technology Services*, B.S., M.Ed., University of Oklahoma.

McDONALD, SONDRA (2020) *Human Resources, Payroll/Benefits Coordinator*, B.B.A., Southwestern Oklahoma State University.

McMAINS, ANNA (2023) *Cameron University-Duncan, Distance Learning Coordinator*. B.S., Cameron University.

McWHIRTER, CHRISTOPHER (2025) *Military Science*.

MEANS, KAY (2012) *Admissions, Assistant Director of Admissions*, B.S., M.S., Cameron University.

MEANS, RYAN (2021) *Business Office, Senior Accountant*, A.S., B.Acct., Cameron University.

MEFFORD, DEBBIE (2006) *Business and Finance, Assistant to the Vice President of Business and Finance*.

METZGER, JEFFREY (2008) *Social Sciences,* B.A., University of Notre Dame; M.A., Ph.D., University of Toronto.

MIESSLER, CY (2025) *Art, Music, and Theatre Arts*, B.M., Indiana University-Bloomington; M.M., Arizona State University; D.M.A., University of Texas at Austin.

MITCHELL, KEITH (2015) *Public Affairs, Senior Director*, B.A., Cameron University; M.S., Oklahoma State University.

MOINIAN, FERIDOON (1983) *Computing and Mathematical Sciences,* B.A., I.I.A.A. (Tehran); M.S., University of Oklahoma.

MONTALVO, EDRIS (2010) *Social Sciences,* B.A., M.S., Ph.D., Texas State University; M.B.A, Texas A&M University-Corpus Christi.

MOORE, EBONY (2024) *Student Support Services, Academic Advisor*. A.A.S., B.S.

MOORE, KYLE (2012) *Chair, Chemistry, Physics, and Engineering*, B.A., B.S., Southwestern Oklahoma State University; Ph.D., University of Wisconsin-Madison.

MORO, RAMIRO (2025) *Chemistry, Physics, and Engineering*, B.S., National University of Engineering; Ph.D., Georgia Institute of Technology.

MORREN, CHRISTIAN (2017) *Art, Music, and Theatre Arts*, B.M., Cameron University; M.M., Oklahoma City University; D.M.A., University of Oklahoma.

MORRIS, FRANCESCA (2023) *Student Enrichment Center, Community Resource Coordinator*. B.A., University of Texas-Arlington; M.H.A., Colorado State University Global.

MORRIS, JOHN (1988) *English and Foreign Languages,* B.A., University of Wisconsin at Eau Claire; M.A., Ph.D., Arizona State University.

MURDOCH-DOHLMAN, JENNIFER (2023) *Psychology*, M.S., Southern Adventist University.

MYERS, ISABELLA (2022) *Student Enrichment Center, Work-Based Learning Experiences Coordinator*, A.A., B.A., Cameron University.

MYERS-JUAREZ, BRANDY (2017) *Human Resources, Employment Coordinator*.

NALLEY, ELIZABETH ANN (1969) *Chemistry, Physics, and Engineering,* B.S., Northeastern Oklahoma State University; M.S., Oklahoma State University; Ph.D., Texas Woman's University.

NAYAK, RAJESH (2018) *Chemistry, Physics, and Engineering,* B.Sc., Utkal University, India, M.Sc., University of Delhi, India; M.E., Delhi College of Engineering, India; Ph.D., Colorado State University.

NEFF, HOLLY (2022) *Student Wellness Center, Mental Health Counselor*, M.S., Cameron University.

NEIGHBORS, COLTEN (2024) *Upward Bound, Academic Advisor***.** B.A., University of Science and Arts of Oklahoma.

NOLEN, TIFFANY (2021) *Student Support Services, Academic Advisor*, B.S., M.Ed., Cameron University.

NORMAN, BEVERLY (2007) *Printing Services, Director*.

NUNNALLY, CLIFTON (2017) *Psychology,* M.S., Cameron University.

OSUNA, JONATHAN (2024) *Business Office, Accountant*. B.Acct., Cameron University.

OUSLEY, DEBORAH (2016) *Agriculture, Biology, and Health Sciences*, B.S., Cameron University; M.Ed., University of Central Oklahoma.

PACHECO, CARYN (1987) *Financial Assistance, Director*, B.S., M.S., Cameron University.

PEARSON, CYNTHIA (2005) *KCCU, Station Manager/Operations Director*. B.A., Cameron University.

PETTIT, MARY (2011) *Agriculture, Biology, and Health Sciences, Technician*, B.S., Cameron University.

PHILLIPS, SAMANTHA (2024) *Student Housing and Residence Life, Coordinator for Staffing and Operations*. B.A., University of Oklahoma.

PHILPOTT, DAWN (2024) *Library, Academic Success Coordinator*, A.A.S., Community College of the Air Force, B.A., American Public University.

POWELL, CELESTE (2021) *Testing Center, Testing Coordinator*, B.A., Cameron University.

PRIYASANTHA, KANDALMA (2021) *Chemistry, Physics, and Engineering*, B.Sc., University of Sri Jayewardenepura (Sri Lanka); Ph.D., Southern Illinois University.

PRUCHNICKI, JENNIFER (2004) *Student Development, Director*, B.A., J.D. University of Oklahoma.

PUTNEY, SCOTT (2001) *Information Technology Services, Windows Server Administrator*, B.A., Cameron University.

RAMIREZ, BRANDY (2019) *Admissions, Recruitment Communications Coordinator*, B.G.S., Missouri Southern State University.

REEVES, LIZZY (2023) *Advancement, Assistant to the Vice President for University Advancement*, B.A., Cameron University.

REIMER-LAW, PORSCHE (2024) *Psychology*, B.S., M.S., Northwestern Oklahoma State University.

RESTIVO, LISA (2009) *Business*, B.B.A., B.Acctg., M.B.A., Cameron University; M.S., National University.

RICE, HOLLY (2011) *Education, Director of Educator Preparation*, B.A., University of Oklahoma; M.A., George Washington University; Ph.D., University of Oklahoma.

RICHARDSON, EILEEN (2014) *Education*, B.S., M.Ed., Northeastern State University; Ph.D., Capella University.

ROACH, RENEE (1998) *Registrar,* A.S., B.B.A., M.B.A., Cameron University.

ROBERTS, JOSEPH (2015) *Art, Music, and Theatre Arts, Theatre Facility Manager*, B.A., Cameron University.

SANDERS, COREY (2013) *Teaching and Learning*, B.S., M.S., Arkansas Tech University.

SCHNEIDER, CARIE (2018) *Chair, Communication, English, and Foreign Languages*, B.A., M.A., M.A., Ph.D., University of Arizona.

SEGER, JEFFREY (2011) *Psychology*, B.S., M.S., Ph.D., Oklahoma State University.

SHAW, KIMBERLY (2025) *Communication, English, and Foreign Languages*, A.A.S, Southwestern Oklahoma State University; B.S., Grand Canyon University; M.F.A., Oklahoma State University.

SINGH, SUSHIL (2021) *Information Technology Services, Analyst/Programmer*, B.S., Cameron University.

SMITH, KELLY (2018) *Agriculture, Biology, and Health Sciences*, B.S., Midwestern State University; M.Ed., University of Central Oklahoma.

SMITH, MICHELLE, (2000) *Education,* B.S., Cameron University; M.S., Southwestern Oklahoma State University; Ed.D., Oklahoma State University.

SOYLU, ALI (2008) *Business,* B.A., Anadolu University (Turkey); M.B.A., Drexel University; Ph.D., Temple University.

STALLINGS, MEGHAN (2012) *Human Resources, Payroll Coordinator*, B.B.A., Strayer University.

STIEB, ASHLEY (2024) *Financial Assistance, Financial Assistance Specialist*. B.S., Northeastern State University.

STIEBENS, CHRISTOPHER (2024) *Communication, English, and Foreign Languages*, B.S., Cameron University; Ph.D., Capella University.

STOLP, CURTIS (2012) *Information Technology Services, Assistant Windows Server Administrator*, B.A., Cameron University.

STRINGER, KATIE (2019) *Communication, English, and Foreign Languages*, B.A., University of Mary Hardin-Baylor; M.A., West Texas A&M University.

SUMPTER, COLTON (2023) *Agriculture, Biology, and Health Sciences*, A.A.S., Oklahoma City Community College; M.H.A, Western Governors University.

SUKAR, ABDUL HAMID (1987) *Business,* B.S.C., Addis Ababa University; M.A., West Texas State University; Ph.D., Texas Tech University.

THACKER, MELISSA (2017) *Sports and Exercise Science*, B.S., Cameron University; DPT, Langston University.

TOOMBS, JEREMY (2021) *Student Enrichment Center, Financial Resource Specialist*, B.M., Cameron University; M.A., Southwestern Baptist Theological Seminary.

UNDERWOOD, KIRSTEN (1996) *Chair, Art, Music, and Theatre Arts,* B.M., Willamette University; M.M., Boston University; Ph.D., University of Oklahoma.

VALENCIA, JANET (2023) *Education-RSU, Education Specialist*. B.A., Northwestern Oklahoma State University.

VAN SANT, MATTHEW (2012) *Chair, Agriculture, Biology and Health Sciences*, B.S., Ball State University; M.S., Indiana State University; Ph.D., University of California, Riverside.

WAHWEAH, DESTINY (2025) *Agriculture, Biology, and Health Sciences*, A.L.S., Redlands Community College; B.S., M.S., Oklahoma State University.

WALTON, AUBREE L. (2002) *Business,* B.Acct., Cameron University; J.D., University of Oklahoma; C.P.A.

WALTON, JUSTIN D. (2000) *Communication, English, and Foreign Languages,* B.A., Oklahoma State University; M.A., University of Oklahoma; M.A.T., Cameron University; Ph.D., University of Oklahoma.

WANG, WENSHENG (2004) *Library, Access Services Librarian*, B.A., Anhui University (China); M.A., East China Normal University (China); M.L.S., University of Arizona.

WARREN, RICKY (2011) *Financial Assistance, Financial Assistance Specialist*, B.A., Cameron University.

WEBER, BRENDA (2018) *President's Office, Assistant to the President*, B.A., M.S., Cameron University.

WHANG, HYUNSOON (1993) *Art, Music, and Theatre Arts,* B.M., St. Louis Conservatory; M.M., The Julliard School; D.M., Indiana University.

WHIPP, BILLIE (2022) *Student Enrichment Center, Coordinator of Student Success*, B.A., Texas Tech University; M.S., Cameron University.

WHITE, STEPHANIE (2023) *Chair, Psychology,* B.S., Texas Tech University; M.S., Oklahoma State University, Ph.D., University of Oklahoma.

WICKER-PUENTE, JORDAN (2022) *Financial Assistance, Information Systems Specialist*, B.S., Oklahoma State University.

WILLIAMS, BEN (2019) *Art, Music, and Theatre Arts*, M.F.A., Kent State University.

WILLIAMS, JANET E. (2008) *Public Affairs, Director of Media Relations*, B.A., Oklahoma State University.

WILLIAMS, JOE (2023) *Psychology*, A.S., B.S., M.S., Cameron University; Ph.D., Capella University.

WILLIAMS, KAI (2006) *Library, Circulation Supervisor*, B.A., Cameron University.

WILLOUGHBY, CHRISTINA (2021) *Student Housing and Residence Life, Coordinator for Administration and Assignments*, B.Tech., New York College of Technology.

WINGATE, DONNA (2022) *Student Accounts, Student Accounts Supervisor*, A.A., Redlands Community College; B.S., Southwestern Oklahoma State University; M.B.A., Southern Nazarene University.

WINTERS, DANA (2020) *Agriculture, Biology, and Health Sciences*, B.S., Cameron University; M.S., Midwestern State University.

WINTERS, PATRICK (2025) *Information Technology Services, Technician*. A.A.S., Cameron University.

WOOLEY, KELLI (2004) *Registrar, Assistant Registrar,* A.S., B.S., M.S., Cameron University.

YOUNG, JOHN (2019) *Physical Facilities, Director*, A.A., Gulf Coast Community College; B.S., Florida State University.

YOUNG, RHONDA (2017) *Public Affairs, Web Manager*. A.A., A.S., Gulf Coast Community College; B.S., Florida State University.

ZAKHARCHENKO, ALEX (2020) *Public Affairs, Graphic Designer*, B.S., B.S., Sumy State University (Ukraine); M.A., New Mexico Highlands University.

ZHAO, CHAO (1999) *Computing and Mathematical Sciences,* B.S., Liaoning Normal University (China); M.S., Ed.D., Texas A&M University-Commerce.

ZHAO, YANJUN (2011) *Communication, English, and Foreign Languages*, B.A., Shanxi University (China); M.A., Ph.D., Southern Illinois University-Carbondale.

ZIMMER, DYLAN (2025) *Veterans Affairs, Veterans Certification Specialist*. B.A., Southwestern Oklahoma State University.

EMERITUS FACULTY

ABBOTT, ERIC (2010) *Art, Music, and Theatre Arts,* B.A., M.F.A., University of Nebraska-Lincoln. 2023

ADAMS, STEPHEN M. (1987) *Communication,* B.S., M.S., Oklahoma State University. 2018

AGUILAR, DONALD (1998) *Computing and Technology,* B.S., Texas A&M Kingsville; M.Ed. Tech., Texas A&M College Station. 2015

ALKIM, EULONDA (1978) *Accounting and Finance,* B.S., University of California at Los Angeles; M.B.A., University of Oklahoma; C.P.A. 1987

AMYX, JACK F. (1965) *Dean, International Business Studies,* B.S., M.S., Ed.D., Oklahoma State University. 2001

ATWATER, O. THOMAS (1978) *History and Government,* B.A., St. Mary's College of California; Ph.D., University of Notre Dame. 2002

BAILLARGEON, MARIE-GINETTE (2008) *English and Foreign Languages,* B.A., M.A., Ph.D., University of Louisiana at Lafayette. 2018

BAUSCH, ROBERT S. (1995) *Social Sciences,* B.A., M.A., California State University-Fullerton; Ph.D., Purdue University. 2024

BENNETT, ALLISON C. (1976) *Chair, Agriculture*, B.S., M.S., Oklahoma State University; Ph.D., Auburn University. 2000

BHATTACHARYA, T.K. (1990) *Business,* B.Sc., (Eng), Banaras Hindu University; Ph.D., University of Oklahoma, CFA. 2010

BLODGETT, RALPH E. (1971) *History and Government,* B.A., M.A., Ph.D., University of Colorado.

BREWER, BURNEY, H. (1959) *Social Science,* B.S., Central State University; M.Ed., University of Oklahoma. 1982

BROOKS, NANCY (1969) *Business,* B.S., M.B.E., Ph.D., University of Oklahoma. 2008

BRUCE, JON (1970) *Education and Psychology,* B.S., Panhandle A&M College; M.Ed., Abilene Christian College; Ed.D., Baylor University. 1993

BRYAN, CLINTON (1988) *Chemistry, Physics, and Engineering,* B.S., University of Arkansas; M.S., University of Kansas; Ph.D., University of Arkansas. 2024.

BRYAN, JACK (1967) *Chair, Art*, B.F.A., University of Oklahoma; M.A., University of Tulsa. 2000

BUCKLEY, GARY (1986) *Chemistry, Physics, and Engineering,* B.S., Northern Illinois University, M.S.; Ph.D., Texas A&M University. (2019)

BURGESS, SYLVIA (1995) *Associate Vice President for Academic Affairs and Director, Office of Extended Learning,* B.A., Cameron University; J.D., University of Oklahoma School of Law; LL.M. (Taxation), Southern Methodist University. 2019

CAMERON, DAVID, A. (1986) *Health and Physical Education,* B.S., Southwest Missouri State University, M.S., Central Missouri State University, Ed.D., University of Arkansas. 2006

CARDWELL, SCHERREY P. (1971) *English and Foreign Languages,* B.A., St. John's College; M.A., Ph.D., University of Arkansas. 2008

CARROLL, JOHNNY (2006) *Chair, Computing and Technology,* B.S., Southeastern Oklahoma State University; M.S., Oklahoma State University; Ph.D., University of North Texas. 2016

CHENOWETH, DON W. (1972) *Politics, Sociology and Criminal Justice,* B.A., University of Minnesota; M.A., Indiana University; Ph.D., St. Louis University. 1998

COSGROVE, JUDY D. (1981) *Mathematical Sciences,* B.A., M.A., University of Arkansas; M.S., Ph.D., University of Oklahoma, 1995

COURINGTON, JOHN (1979) *Business,* B.S., Arizona State University; M.S., Ph.D., Oklahoma State University. 2008.

CRANE, JOE (1969) *Chair, Physical Sciences,* B.S., M.S., Ph.D., Oklahoma State University. 2006

CRAWFORD, SUZANNE (1985) *History and Government,* B.A., M.A., Ph.D., University of Oklahoma. 2016

DAS, P. K. (2004) *Physical Sciences,* B.S., M.S., Dacca University (Bangladesh); Ph.D., University of Houston. 2015

DAVIS, DON C. (1980) *President,* B.A., J.D., University of Oklahoma. 2002

DODD, JERROLD L. (2000) *Agriculture, Biology, and Health Sciences,* B.S., M.S., Fort Hays State University; Ph.D., North Dakota State University. 2019.

DUDASH, KARIN (2000) *Criminal Justice and Sociology,* B.A., University of Hawaii; M.B.S., Cameron University. 2016

DUNN, MICHAEL T. (2003) *Agriculture, Biology, and Health Sciences,* B.S., M.S., Boise State University; Ph.D., Ohio University. 2021

DZINDOLET, MARY (1993) *Psychology,* B.A., Skidmore College; M.A.S., Louisiana State University; Ph.D., University of Texas. 2024

ELLIS, KENNETH (1974) *Education and Psychology,* B.S., East Central State University; M.S., Ed.D., University of Oklahoma. 1990

FENNEMA, DAVID H. (1983) *Theatre Arts,* B.S., M.A., University of Wisconsin; Ph.D., Indiana University. 2012

FINKE, WILLIAM C. (1966) *Physical Science,* B.S., Southeastern State College; M.T. Southwestern State College; Ph.D., University of Oklahoma. 1987

FISCHER, LEON (1991) *Agriculture, Biology, and Health Sciences,* B.S., Cameron University; M.S., Ph.D., Oklahoma State University. 2017.

GEORGE, DICK L. (1985) *Mathematical Sciences,* B.S., Oklahoma State University; Ph.D., Duke University. 1998

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SUTHERLIN, TOM (1972) *Computing and Technology,* A.S., B.S., M.S., Oklahoma State University. 2010

TABATABAI, MOHAMMAD (1984) *Mathematical Sciences,* B.S., National University of Iran; M.S., Florida State University; Ph.D., Memphis State University. 2014

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THOMLINSON, VIVIAN A. (1988) *English and Foreign Languages*, B.S., East Texas State University; M.A., PH.D., Texas Women's University. 2014

TREADWELL, GREGORY (2003) *Business,* B.Acct., Cameron University; M.S.A, Oklahoma City University; D.B.A., Northcentral University; E.A., C.F.M., C.F.E, C.M.A., C.P.A. 2022.

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