# CS jpueblo 

# UNIVERSITY CALENDAR 2013-2014 <br> Colorado State University-Pueblo 

## FALL AND SPRING SEMESTERS

Regular academic semesters consist of 15 -week terms, including official holidays and the final examination period. Specific information about each academic semester is available in the Semester Notes posted on our University web site at: http://www.colostatepueblo.edu/Records/SemesterNotes/Pages/SemesterNote s.aspx prior to the beginning of each semester.

## ORIENTATION SCHEDULE

New first-year and new transfer students must attend orientation. Please view orientation sessions and dates at: http://www.colostate-pueblo.edu/Orientation.

## FALL <br> $\underline{2013}$

Graduation Planning Sheets Due ............... Feb. 1 (13)
Registration Begins March 11
Classes Begin .................................................. Aug. 26
End Add Period (full-term courses) ................. Aug. 30
End Drop Period (full-term courses)................. Sept. 9
End of Full-term Course Withdrawal Period ..... Oct. 25
Thanksgiving Break.................................. Nov. 25-29
Classes End ...................................................... Dec. 6
Final Exams ................................................ Dec. 9-13

SPRING $\underline{2014}$
Graduation Planning Sheets Due ............ Sept. 13 (13)
Registration Begins ...................................Oct. 21 (13)
Classes Begin ...................................................Jan. 13
End of Add Period (full-term courses) ...............Jan. 17
End Drop Period (full-term courses).................Jan. 27
End of Full-term Course Withdrawal Period ..March 14
Spring Break
.March 24-28
Classes End .....................................................April 25
Final Exams .......................................April 28 - May 2
Commencement................................................. May 3

Short-term courses in Fall and Spring have shorter course drop and withdrawal dates. These appear on the student schedule.
SUMMER COLLEGE
Summer College consists of multiple sessions. Specificinformation about Summer College is available in theSemester Notes posted on our University web site athttp://www.colostate-pueblo.edu prior to the beginning ofthe first session.
SUMMER ..... $\underline{2014}$
Graduation Planning Sheets Due ..... Jan. 31 (14)
(For Summer \& Fall 2014)
Registration Begins ..... March 10
First 4, 6 and 12-week Sessions
Classes Begin ..... May 12
Memorial Day (University Closed). ..... May 26 (M)
Independence Day Holiday Observed
(University Closed) ..... July 4 (F)
Classes End
(First 4-week) ..... June 5
(First 6-week) ..... June 19
(12-week) ..... July 31
Second 4-week Session
Classes Begin ..... June 9
Classes End ..... July 3
Second 6-week Session
Classes Begin ..... June 23
Independence Day Holiday Observed (University Closed) ..... July 4
Classes End ..... July 31
Third 4-week Session
Classes Begin ..... July 7
Classes End ..... July 31

All individual Summer course drop and withdrawal dates appear on the student schedule.

# Colorado State University-Pueblo 2200 Bonforte Boulevard Pueblo, Colorado 81001 

Telephone: (719) 549-2100
Web site: www.colostate-pueblo.edu


#### Abstract

An Invitation You are cordially invited to visit the Colorado State UniversityPueblo campus, meet members of the faculty and administration, and inspect the facilities of the university. Escorted tours of the campus will be provided on request. The administrative offices are open from 8 a.m. to 5 p.m. Monday through Friday. Please call or write the Visitor Center in advance of your visit: (719) 549-2418.




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## DEGREE PROGRAMS

The following is a list of majors and degrees available at Colorado State University-Pueblo. Many of these majors include special emphases and many departments also offer minor programs of study. For more specific information please refer to the college and department sections of this catalog.

## COLLEGE OF EDUCATION, ENGINEERING, AND PROFESSIONAL STUDIES

Athletic Training ..... BS
Automotive Industry Management ..... BS
Civil Engineering Technology ..... BSCET
Construction Management ..... BS
Education ..... M.Ed.
Engineering ..... MS
Engineering with a Specialization in Mechatronics ..... BSE
Exercise Science, Health Promotion, and Recreation ..... BS
Industrial Engineering ..... BSIE
Industrial and Systems Engineering ..... MS
Liberal Studies ..... BS
Nursing ..... BSN, MS

## Teacher Education Program

The Teacher Education Program collaborates with other academic units to offer program leading to Colorado teacher licensure in the following endorsement areas:

```
Art (K-12) Mathematics (7-12)
Elementary Education (K-6)
Music (K-12)
English (7-12)
Foreign Languages (Spanish 7-12)
Physical Education (K-12)
Science (7-12)
Linguistically Diverse
    (Requires an initial teaching license)
```


## COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

Art. ..... BA, BFA
English ..... BA, M.A.
Foreign Language-Spanish ..... BA
History BA, BS, M.A.
Mass Communications ..... BA, BS
Music. ..... BA
Political Science ..... BA, BS
Psychology ..... BA, BS
Social Science (offered through Continuing Education only). ..... BA, BS
Social Work ..... BSW
Sociology ..... BA, BS
COLLEGE OF SCIENCE AND MATH
Biochemistry ..... MS
3+2 Joint Degree Program ..... BS + MS
Biology ..... BS, MS
3+2 Joint Degree Program ..... BS + MS
Chemistry ..... BS, MS
3+2 Joint Degree Program ..... BS + MS
Mathematics ..... BA, BS
Physics ..... BS

## HASAN SCHOOL OF BUSINESS

Accounting ..... BSBA
Business Administration ..... MBA
3+2 Joint Degree Program - Computer Information Systems ..... BS + MBA
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3+2 Joint Degree Program BS + MS ..... 86, 188
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Foreign Language Emphasis
Health \& Physical Education Emphasis
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Space Studies for Educators Emphasis
Special Education Emphasis
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Railroad Engineering Emphasis
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Adult/Gerontology Acute Care/Family Nurse Practitioner Emphasis
Nurse Educator EmphasisPsychiatric-Mental Health Nurse Practitioner Emphasis

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The following is an alphabetical list of undergraduate majors and their emphasis areas that are available at Colorado State University-Pueblo. This list is subject to change.
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Pre-Dental
Pre-Medical
Pre-Occupational Therapy
Pre-Optometric
Pre-Pharmacy
Pre-Physical Therapy
Pre-Physician Assistant
Pre-Podiatric Medicine
Pre-Veterinary Medicine
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General Exercise Science Emphasis
Health Promotion/Wellness Emphasis
Outdoor Leadership Emphasis
Physical Education K-12 Teacher Preparation Emphasis
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## CERTIFICATE PROGRAMS

Some departments offer certificates upon completion of certain programs. The University does not transcript certificates, so all records of the program completion and the issuance of the actual certificates are administered by the issuing department. The following is a list of approved certificates available at Colorado State University-Pueblo. This list does not contain any certificates given through our Continuing Education Department. This list is subject to change.
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## THE UNIVERSITY

## HISTORY

Colorado State University-Pueblo has had many names and identities since it was established in 1933:

| 1933-37 | Southern Colorado Junior College |
| :--- | :--- |
| 1937-63 | Pueblo Junior College |
| $1963-75$ | Southern Colorado State College |
| 1975-2003 | University of Southern Colorado |
| 2003-Present | Colorado State University-Pueblo |

During the University's over 75 year history, it has remained focused on serving the educational and economic development needs of Southern Colorado. As it has grown to become a regional, comprehensive university, CSU-Pueblo offers more programs and serves more students, but its primary mission is the same.

## MISSION

Colorado State University was established by state law:
There is hereby established a University at Pueblo, to be known as Colorado State University-Pueblo, which shall be a regional, comprehensive university with moderately selective admissions standards. The University shall offer a broad array of baccalaureate programs with a strong professional focus and a firm grounding in the liberal arts and sciences. The University shall also offer a limited number of graduate programs. (Colorado Statutes 23-31.5-101)

In April, 2005 the Board of Governors of the Colorado State University System adopted a complementary, focused mission statement for the University that stresses its distinctiveness and central commitments.

Colorado State University-Pueblo is committed to excellence, setting the standard for regional comprehensive universities in teaching, research and service by providing leadership and access for its region while maintaining its commitment to diversity.

CSU-Pueblo offers a wide array of undergraduate degree programs in the humanities, social sciences, sciences and math, education, engineering, nursing, business, and other professional areas. The University's educational focus is grounded in the traditional liberal arts and sciences, and addresses students' immediate and longterm educational needs. Students graduate with the knowledge necessary to enter their professions and with the problem solving, critical thinking, research, and communication skills required to keep current in those professions in the future.

Characteristic of regional comprehensive universities nationwide, CSU-Pueblo also offers selected masters degrees that meet regional and broad societal needs, including business, nursing, engineering, education, history and the sciences (biology, biochemistry, and chemistry).

As sister institutions, CSU-Pueblo and CSU in Fort Collins share many important values and commitments, even while they pursue different missions-CSU in Fort Collins as a large research, doctoral granting university and CSUPueblo as a small comprehensive, masters granting university. Both universities are committed to excellence and strive to set the quality standards for their types of institutions. Both have excellent undergraduate and graduate programs that serve the citizens of Colorado through teaching, research, and service. Both universities promote civic engagement, freedom of expression, innovation, environmental sustainability, inclusiveness and diversity, integrity and mutual respect, and both are committed to employing a student-centered focus, providing opportunity and access, and being accountable.

High quality teaching and learning is Colorado State University-Pueblo's highest priority. In recent years, program offerings have been expanded, new teaching and learning methods-especially those involving active, applied learning and technology-have been incorporated into all programs, faculty have strengthened their scholarly activities to stay current in their fields of expertise, and effective student academic support services (e.g., advising, learning centers, career planning) are readily available. As a result, CSU-Pueblo offers comprehensive and effective learning experiences that meet the many needs of our students.

The University is similarly committed to expanding access to higher education, especially for Colorado citizens. It has expanded its recruitment, admissions and financial aid resources, as well as its evening and continuing education offerings, to provide high quality educational opportunities for a broader student population. It also works closely with other public institutions in the state to smooth the transfer process for incoming, outgoing, and dual enrollment students.

CSU-Pueblo's success in fulfilling its mission to be an educational resource for the state's diverse population is documented by the characteristics of our student body. We have a diverse student body including traditional and non-traditional students, campus-based and communitybased students, students from Colorado and from foreign countries, first-year and transfer students, students fresh out of high school, students who are working professionals with families to support, and students of many different ethnicities and cultures. The University is strongly committed to providing access to members of all minority
groups, particularly the Hispanic populations within its service area, emphasizing and fostering cultural pluralism, enhancing the traditions of culture and language, encouraging the development of economic opportunities, providing appropriate academic support programs, and ensuring equal opportunity for all persons who are, or may become, members of the university community. Indeed, because more than 25 percent of our students are Hispanic, the Federal Government has designated CSUPueblo as a "Hispanic Serving Institution".

The high level of diversity in our learning community coupled with excellent academic and student life programs prepare our graduates well for the complex professional and personal lives that define modern society. Our graduates have proven their ability to transcend society's socioeconomic, educational and cultural barriers by successfully entering professional occupations and graduate programs as highly informed and engaged members of their communities.

As a regional comprehensive university, CSU-Pueblo takes a leadership role in enhancing the overall quality of life and economic growth in southeastern Colorado. Faculty, staff, and students provide and benefit from a wide array of community services including cultural and educational events and programs, clinical and health resources, student internships, workshops, consultations, and research on community and business problems. In partnership with other community organizations, the University has committed its time and talents especially to initiatives aimed at enhancing economic development, pre-kindergarten through high school educational opportunities, and a variety of cultural activities.

In summary, the University's statutory and focused mission statements guide the development of its comprehensive curriculum and degree programs, the implementation of its high academic standards, the broad accessibility that students have to its resources, and its active involvement in service to the regional community. Directed by its clear mission-based commitments and energized by its fine faculty, staff, and students, Colorado State University-Pueblo strives for excellence in all of its activities.

## THE CAMPUS

CSU-Pueblo spans more than 275 acres on the northeast edge of Pueblo, a culturally diverse city of more than 100,000 in the colorful Pikes Peak region of southern Colorado. Located on the Front Range of the Rocky Mountains, the University enjoys an average of 320 days of sunshine each year. From sailing on Lake Pueblo, mountain biking on the miles of nearby trails, whitewater rafting on the Arkansas River or skiing and snowboarding in the nearby mountains, the University's 4,800+ students enjoy a wide range of outdoor activities. The newly
completed Student Recreation Complex houses the Outdoor Pursuits Program, which provides outdoor gear such as mountain bikes, kayaks, tents, backpacks and other camping and climbing gear to students at nominal prices, as well as classes on how to use that equipment.

With an emphasis on student life, our Occhiato University Center houses the Office of Student Affairs, the Associated Students Government, and dozens of other student clubs and organizations to serve every interest. Concerts, movies, speakers, comedians and stage plays and musical performances are a regular feature at the many venues on campus and a new, artificial turf student recreation field hosts intramural and pickup games of flag football, soccer, lacrosse and more.

We offer a wide variety of housing options to serve student needs and interests. We have both traditional residential facilities and town house living accommodations for our upper classmen and have the ability to house close to 1500 students. Our housing programs offer vibrant activities, programs with services that enhance the students' undergraduate experience. Support services such as tutoring, advising, referrals, study services and a multitude of engagement opportunities enable our residents to have a safe and fulfilling collegiate experience and make it easier to achieve success in their educational programs. It is common to see faculty lead programs and interactions with residents, while others take advantage of lounges, exercise facilities, computer labs, basketball courts, a bistro and other amenities that make their residential experience a home away from home.

We have also added a new football and track facility to our athletic complex, which houses intercollegiate programs in football, softball, baseball, and women's track and field. Our basketball, volleyball and wrestling programs now play in a newly renovated and expanded Massari Arena which also houses a new climbing wall, a renovated swimming pool, and weight and aerobic equipment for student use.

## GOVERNANCE

CSU-Pueblo is governed by the Board of Governors of the Colorado State University System, which also governs Colorado State University in Fort Collins. The Colorado Department of Higher Education, the central policy and coordinating board for all public institutions, establishes policy on legislative, academic, and fiscal matters.

On matters delegated to the University, CSU-Pueblo is committed to a system of shared governance in which faculty, staff and students are engaged in setting the agenda for the University and in making decisions about how best to reach our goals and fulfill our mission. The President is assisted by a University Leadership Team which consists of the Provost, the Vice President for

Finance and Administration, Deans, and representatives from the Classified Staff and Faculty Senate, among others.

## ACCREDITATION



Colorado State University-Pueblo is accredited by the Higher Learning Commission, a Commission of the North Central Association of Colleges and Schools, 30 N . LaSalle St., Suite 2400, Chicago, IL, 60602-2501, Phone (800) 621-7440.

Individual programs approved by specialized accreditation agencies include: athletic training, the Commission on Accreditation of Athletic Training Education (CAATE); chemistry, the American Chemical Society; civil engineering technology, the Technology Accreditation Commission of ABET; industrial engineering, the Engineering Accreditation Commission of ABET; engineering, the Engineering Accreditation Commission of ABET; education, the Colorado State Board of Education and the Teacher Education Accreditation Council; music, the National Association of the Schools of Music; nursing, the National League for Nursing Accrediting Commission (NLNAC); and social work, the Council of Social Work Education (CSWE). The Hasan School of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB) International.

## AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY COMMITMENT

Colorado State University-Pueblo is committed to providing an environment free from unlawful forms of discrimination, including sexual harassment, against any person based upon race, color, ethnicity, religion, gender, national origin, age, sexual orientation, disability, or status as a veteran of the Vietnam Era.

Also, the University provides affirmative action to ensure that protected class applicants are employed and that all employees are treated fairly during employment without regard to their membership in any of the aforementioned protected groups, in accordance with the laws of the United States and the State of Colorado. Such action includes, but is not limited to affirmative efforts with respect to employment, promotion, transfer, recruitment, advertising, layoff, retirement, or termination; rate of pay or other forms of compensation and selection for faculty development activities. The University posts in conspicuous places notices setting forth the provision of
its nondiscrimination policy, affirmative action plans and programs, and equal opportunity commitments.

The University prohibits discrimination based on the aforementioned criteria above in admission or access to, treatment of, or employment in its educational programs or activities. The Americans with Disabilities Act (ADA) prohibits any form of discrimination based on disability in admission to, access to, and the operations of programs, services or activities at Colorado State University-Pueblo. Inquiries concerning Titles IV, VI, and VII of the 1964 Civil Rights Act Section 504, ADA, and Title IX of the Education Amendments of 1972 may be referred to the Director of Affirmative Action/EEO \& Campus Diversity, Colorado State University-Pueblo, 2200 Bonforte Boulevard, Pueblo, Colorado, 81001-4901, Phone (719) 549-2210 or the Office of Civil Rights (OCR) Department of Education, Colonnade Center, 1244 Speer Blvd., Denver, CO 802043582. Students with questions, complaints and requests for additional information regarding ADA may be directed to the ADA Coordinator at (719) 549-2663 (students); employees may call (719) 549-2441.

For more information please visit www.colostatepueblo.edu/AffirmativeAction.

## THE CLERY REPORT

University public safety is provided by the Pueblo County Sheriff's Office. The Jeanne Clery Disclosure of Campus Security and Campus Crime Statistics Act is the landmark federal law that requires colleges and universities to disclose information on security policies and timely, annual information about crime on and around campus. The CSUPueblo Security and Fire Safety Report can be found at http://www.colostatepueblo.edu/campussafety/Pages/Default.aspx

## CAMPUS CLOSURE PROCESS

Due to extreme weather conditions, energy resource reductions or situations impacting normal operating conditions, it may be necessary to curtail or shut down university operations. The Campus Closure Policy will be followed in all CSU-Pueblo closure situations.

1. The Pueblo County Sheriff's Office at CSU-Pueblo will monitor any adverse weather condition or situations that may significantly impact University operations and will initiate the campus closure process. If adverse weather conditions exist at the Colorado Springs campus, the campus administrator will contact the CSU-Pueblo Sheriff's Office to initiate the process.
2. For a full day closure, the Pueblo County Sheriff's Office will provide a verbal report by 5 a.m. to the Associate Vice President (AVP) for Facilities, including a general review of conditions, impending
developments, and a recommendation for action. The AVP will then contact the Vice President for Finance and Administration, who in consultation with the President, will make a final decision on closure of the University. If the President cannot be reached within a time frame that allows for a 6 a.m. announcement of closure, the Vice President has the authority to make the closure decision. Early closures during a school day that impact on-campus and off-campus evening classes (i.e., Colorado Springs), student activities, or athletic competitions should be made by 3 p.m.
3. The Vice President for Finance and Administration will notify the Provost and the Executive Director of External Affairs of any closures or shutdowns, including:
a. Partial closedown or delay-staff to report but no classes to be held.
b. Total closedown-no staff to report; no classes.
c. Early Closure-Campus operations to cease before end of regular work day.
4. Unless instructed otherwise, all designated essential personnel (e.g., residence halls, food service, Sheriff's Office, physical plant, environmental health and safety, and auxiliary service units) will report to work.
5. The Executive Director of External Affairs is responsible for notifying local and regional radio and television stations of campus closures through the Flashnet Media Service. Students and staff may access closure messages for the University and other area entities by logging on to http://www.flashnews.net/rocky.html and clicking on View Current Info or signing up to receive text message notification.

To receive text message notifications, students can simply sign on to their PAWS Student Services account and register in the -Erergency Text" tab. Students will be prompted to verify or update their information to the service when they log onto PAWS Student Services to register for classes each term. Faculty and staff can simply sign on to the Employee Portal account and register in the -mergency Text" tab. Faculty and staff can also fill out the Emergency Text Messaging form and send it to Human Resources. Faculty and staff should update their information with Human Resources as it changes.

The following scenarios are pre-approved by University officials for immediate text notification:

- Dangerous Situation
- Hazardous Materials Warning
- Severe Thunderstorm Warning
- Tornado Warning
- Blizzard Warning

If the University is closed, a message also will be posted on the University's home page at http://www.colostate-pueblo.edu. Closure notification also will include the Pueblo Transportation Company and any non-law enforcement organizations that are appropriate.
6. Despite improving conditions, any decisions for closure will remain in effect for the period of time originally specified.

## CAMPUS EMAIL POLICY

CSU-Pueblo uses its campus email system as its official mode of communication. Consequently, all students, staff and faculty are required to utilize their assigned campus email account. Students are expected to read and respond to messages in a timely, consistent fashion. If you need assistance accessing your email, contact the CSU-Pueblo Help Desk at 549-2002.

## TERMS OF THIS CATALOG ISSUE

Students graduate under the catalog requirements noted in the Academic Policies section of this catalog.

All statements made in this catalog and similar publications distributed generally to prospective or admitted students or interested parties shall be for informational purposes only and should not be interpreted as being contractual. Colorado State University-Pueblo reserves the right to change, modify, or cancel any course, program, procedure, policy, financial requirement, or disciplinary arrangement set forth in this catalog whenever, in its sole discretion, it determines such action to be appropriate. Furthermore, Colorado State University-Pueblo will not be responsible for any failure to present or complete any course or program or to perform any other activity, function, or obligation mentioned in this catalog.

Modifications to this Catalog pertaining to the academic policies and curricular requirements of the University, its individual colleges and its individual academic programs must be reviewed and approved by the Faculty Senate in accordance with the provisions of Chapter 1 of the Faculty Handbook prior to taking effect.

## COLORADO STATE UNIVERSITY SYSTEM

## JOINT PROCLAMATION AGAINST SEXUAL MISCONDUCT

The Colorado State University System and its institutions, have zero tolerance for sexual misconduct among members of our University communities.

All members of the University community, and their guests, have the right to be free from unwanted sexual contact, coercion, abuse, violence, threat of violence, and harassment and are expected to conduct themselves in a
manner that does not infringe upon the rights of others. When an allegation of sexual misconduct is brought forward, the University will investigate the matter and take appropriate action. Anyone found to have committed sexual misconduct will face immediate and appropriate disciplinary action, up to and including expulsion from the University.

We will bring this message to all corners of our University, and nurture the core value that fosters a safe and healthy environment for members of our community. Further, we emphasize that sexual assault survivors deserve our support and assistance.

We strive to build healthy relationships within the university community free from sexual violence. To that end, the Colorado State University System is committed to raising the awareness of sexual misconduct actions; providing preventative training courses and promoting a healthy and safe environment for our students.

## BOARD OF GOVERNORS NON-DISCRIMINATION POLICY

The Board of Governors is committed to a policy of nondiscrimination for the institutions it governs in accordance with all applicable anti-discrimination and civil rights laws. Accordingly, the Board of Governors does not discriminate on the basis of race, age, color, religion, national origin, gender, disability, veterans status, genetic information, or sexual orientation including gender identity and gender expression.

## CSU-PUEBLO NOTICE OF NON-DISCRIMINATION AND COMPLIANCE WITH TITLE IX

CSU-Pueblo is also committed to the non-discrimination policy set for above. Further, Title IX of the Education Amendments of 1972, 20.U.S.C. Sec. 1681 et seq. (-itle IX"), prohibits discrimination on the basis of sex in any federally funded education program or activity.

In this connection, sexual harassment which includes acts of sexual violence is prohibited. CSU-Pueblo has zero tolerance for sexual misconduct among members of our University Communities. For further reference please refer to the CSU-Pueblo Student Conduct Code and Sexual Misconduct Policies.

If you have any questions, concerns or claims relating to the application or enforcement of Title IX at CSU-Pueblo please contact the following Title IX Coordinators or the U.S. Department of Education:

1. University Sexual Response Coordinator at (719) 549-2223
2. Director of AA/EEO at (719) 549-2210
3. The United States Department of Education Office for Civil Rights
400 Maryland Avenue, South West
Washington, D.C. 20202-1100
Phone: (1-800-421-3481)
Website: www.ed.gov

Colorado State University-Pueblo welcomes applications from all persons interested in post-secondary education. The Office of Admissions is located in the Administration building. All correspondence concerning admission should be addressed to the Office of Admissions, Colorado State University-Pueblo, 2200 Bonforte Boulevard, Pueblo, CO 81001-4901 or by email to info@colostate-pueblo.edu.

The Visitor Center is located in the Buell Communications Center at the entrance of campus. The Visitor Center provides services specifically for new firstyear and transfer students, including campus tours and information on the admissions process. Campus tours are available Monday thru Friday at 11 a.m. and 2 p.m. Contact the Visitor Center at (719) 549-2418 or visitorscenter@colostate-pueblo.edu or make a tour reservation at www.goCSUPueblo.com.

Prospective students may obtain information about all CSU-Pueblo programs, as well as admission procedures, from the Visitor Center or the Office of Admissions.

## ENTERING FRESHMEN

## Admission Standards

Colorado State University-Pueblo's admission process is designed to promote diversity within the student population and to assure equal access to qualified applicants. The final admission decision is based on the applicant's potential for attaining a degree at the University.

First-time applicants are eligible for consideration for admission to Colorado State University-Pueblo if the CDHE admissions index score is 86 or higher. The score can be achieved by various combinations of high school grade-point average and ACT composite or SAT combined scores. Such combinations include:

| High School GPA | Minimum ACT or | SAT Composite |  |  |
| :---: | :---: | ---: | ---: | :---: |
| 2.000 | 25 | 1120 | -1150 |  |
| 2.300 | 22 | 1010 | -1040 |  |
| 2.600 | 20 | 930 | -960 |  |
| 3.000 | 16 | 750 | -790 |  |
| 3.300 | 14 | 610 | -680 |  |

If applicants do not achieve an index score of at least 86 with a minimum cumulative GPA of 2.0 and completion of the Higher Education Admission Requirements (HEAR), the credentials will be reviewed by an admissions committee which will base a recommendation for admission on:

1) The applicant's academic and personal potential to benefit from or contribute to University programs; and
2) The applicant's previous academic record. Students with non-traditional backgrounds are encouraged to apply.

A student admitted to Colorado State University-Pueblo with an index score of 86 or below is required to enroll in an academic skill building and success course in the first term of enrollment as a condition of admission to the University. The default course for all majors is US 101. The following courses are also acceptable: MUS 101, EN 101, EXHP 101, AIM 105, CET 101, BIOL 171, and BUSAD 101. Successful completion of the academic skill building course is a requirement of continued enrollment after the first semester. Students who are admitted with an index score of 80 or below are required to take a three credit course (US 151) in their first semester. Students who are admitted with an index score of 81 to 86 are required in their first semester to take either a one credit course (US 101) or substitute a course specified by their program and approved by the Curriculum and Academic Policies Board.

- NOTE: Acceptance by the University does not necessarily mean acceptance into a particular degree program, some of which have admission requirements beyond those of the University.


## Admission Requirements

Students may apply any time after the completion of their junior year in high school. One official transcript of high school work should be sent directly to the Office of Admissions from the high school, and a final transcript must be submitted after the applicant graduates from high school. Students who apply on the basis of the General Education Development (GED) tests in place of high school graduation must have the agency issuing the GED tests forward the test scores (not the certificate) to the Office of Admissions.

## Applicants must submit:

1) A completed CSU-Pueblo application;
2) A $\$ 25$ application fee (non-refundable);
3) An official transcript of high school records or GED score of a 450 composite; and
4) Scores from either the ACT or the SAT.
(Not required of applicants who are 23 years of age or older or who have been out of high school five or more years.)

NOTE: Applicants who have completed their secondary education through alternative options such as home schooling should submit documentation of that education (i.e., transcript, portfolio, narrative statements of accomplishment, etc). Consideration for admission will be in a similar manner as that for applicants from traditional
high school programs, but additional emphasis will be placed on scores obtained on standardized examinations.

Graduates of Colorado high schools participating in the standards based admissions project will be considered according to the current state guidelines for that project.

## Application Deadlines

For the best scholarship, registration time, and housing considerations, applicants should apply and be admitted as early as possible. Those still in high school may apply once they have completed six semesters. To be considered for a specific term, all documents required for admission must be received in the Office of Admissions by the deadline for that term. Transfer students should allow sufficient time to have official transcripts sent from all institutions previously attended.

Application forms and credentials must be filed by the following deadlines:
Fall Semester.........................................August 1
Spring Semester ....................................January 2

A $\$ 25.00$ Late Application Fee (non-refundable) will be charged for applications received after the deadline in addition to the $\$ 25.00$ Application Fee.

## Higher Education Admission Requirements (HEAR)

The Colorado Department of Higher Education Admission Requirements (HEAR) requires completion of the following high school course work for admission to any Colorado four-year public college or university, including Colorado State University-Pueblo.

- Four years of English;
- Four years of mathematics, including Algebra I, Algebra II, Geometry, Trigonometry, Pre-Calculus, Calculus, etc.;
- Three years of natural science, including at least two courses with laboratory work;
- Three years of social studies, including U.S. History or World Civilization;
- One year of foreign language; and
- Two years of academic electives.

More information is available through the Admission Standards section of the Colorado Department of Higher Education website:
http://highered.colorado.gov/Academics/Admissions/

## Advanced Placement

See Credit by Examination (Academic Policies section).

## Basic Skills Assessment

The University complies with statewide policies adopted by the Colorado Department of Higher Education (CDHE). Effective fall 2001, every public institution of higher education in Colorado is required to assess the reading, writing, and mathematic skill levels of all first-time, degreeseeking students. Students whose assessment scores fall below the minimum requirements must enroll and successfully complete the appropriate skill building course(s) within their first 30 credit hours towards graduation. Basic Skills Levels are determined by ACT or SAT scores. If students do not have an ACT or SAT score they must take the appropriate ACCUPLACER test.

Cut scores are listed below:

## CDHE Placement Guidelines

## Skill Area: Reading

$\begin{array}{lll}\text { ACT Subscore } & \text { SAT Subscore } & \text { ACCUPLACER Score } \\ \text { Reading .... } 17 & \text { Critical Rdg... } 430 & \text { Reading Comp...... } 80\end{array}$
Skill Area: Writing
ACT Subscore SAT Subscore ACCUPLACER Score
English....... 18 Critical Rdg... 440 Sentence Skills ...... 95

## Skill Area: Mathematics

ACT Subscore SAT Subscore ACCUPLACER Score
Math.......... 19 Math........ 460 Elementary Algebra. 85

With an ACT math subscore of 19 or an SAT subscore of 460 no skill building courses are needed in math unless the general education math course mandated for your major requires it.

For more information on Basic Skills Assessment, contact the Director of Student Academic Services at (719) 5492581.

## TRANSFER STUDENTS

Students who have attended other colleges or universities and are seeking admission to CSU-Pueblo for the first time must submit:

1) A completed CSU-Pueblo application;
2) A $\$ 25$ application fee (non-refundable);
3) Final high school transcripts and ACT or SAT scores must also be submitted if total transfer credits earned are less than 30 transferable semester hours; and
4) Official transcripts sent directly to CSU-Pueblo from each college attended. (No part of the previous collegiate record may be disregarded, all coursework from all previous colleges
attended must be submitted. Failure to list all institutions previously attended is a serious offense that may result in the rescinding of admission, loss of credit, or disenrollment.)

Note: Transfer students who have less than 13 transferable collegiate semester credit hours must meet the first-time freshmen standards. This includes international applicants. College credit earned in high school is eligible to count toward a degree at CSU-Pueblo, but cannot classify a student as a transfer student.

Transfer students must be in good standing at the institution last attended and have at least a 2.300 cumulative grade-point average. If not, the records will be reviewed and a recommendation on admission will be made by the admissions committee.

Students who are enrolled at another institution at the time application for admission is made to CSU-Pueblo should arrange to have one official transcript from the current institution sent with the application. A final transcript must be sent when the final term is completed.

After admission and once all official transcripts have been received, evaluations of transferable credit will be completed and mailed.

Each student must indicate all previous college experience on his or her application. Applicants may not ignore previous college attendance. Students who fail to inform the Office of Admissions of all previous college work will be subject to delay of admission, loss of credit, rejection of application and/or cancellation of enrollment.

## Transfer of Credit

Transfer students should be aware of the 10-year time limit on credit earned toward a bachelor's degree, which applies to both transfer and resident credit. (Additional information appears in the Academic Policies section of this catalog.)

Credit is accepted by CSU-Pueblo from institutions accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools or similar regional accrediting bodies. For credit toward degree requirements, CSU-Pueblo accepts a maximum of 60 semester hours from community or junior colleges and/or a maximum of 90 semester hours from four-year institutions toward degree requirements.

Transfer grades and credits are not computed within the cumulative grade point average earned at Colorado State University-Pueblo. Courses completed with a grade of Cor better are accepted in transfer.

Colorado State University-Pueblo accepts a liberal-arts based Associate of Arts or Associate of Science degree
from a regionally accredited institution as fulfilling the University's general education requirements. However, some CSU-Pueblo majors may have specific general education requirements that must be completed. Associate of Applied Science degrees are not transferrable to CSU-Pueblo.

AA and AS degrees earned at an accredited Colorado community/junior college satisfy the University's general education requirements, except for those courses which are major specific. Students generally transfer in 60 semester hours and achieve junior status.

Credit from an institution without regional accreditation may be accepted by petition for transfer after the student has completed at least one term of full-time coursework at CSU-Pueblo with a C (2.000) average or better.

The University accepts up to eight semester hours of cooperative education courses in transfer. Cooperative education course work, to be acceptable, must include a clearly defined academic element, such as a study plan or reading assignments.

Military service credit is evaluated when official copies of transcripts for military schools are received. Army personnel should submit an AARTS Transcript, Navy and Marine personnel a SMART Transcript, and Air Force personnel a Community College of the Air Force Transcript. Courses are evaluated according to the American Council on Education (ACE) Guidelines. A maximum of 20 semester hours of credit is counted toward a baccalaureate degree.

Acceptance of credit does not necessarily mean that a specific department will accept the same credit toward its major requirements. Each department evaluates transfer courses to determine applicability to major and minor requirements.

All application materials for applicants who decide not to enroll for the term for which they applied will be kept on file in the Office of Admissions for one year. Official transcripts received from other institutions cannot be relinquished.

## College Level Examination Program

See Credit by Examination (Academic Policies section).

## Appeals Process

If a student disputes the University's evaluation of credits from other Colorado public institutions, the student must file a written appeal with the Director of Admissions within 15 calendar days of receiving the evaluation. If the student fails to file an appeal within the 15-day period, the decision made in the transfer evaluation will be binding. The Director of Admissions has 30 calendar days to respond. If the student does not receive a response or
feels CSU-Pueblo did not follow its policies and procedures, the student can appeal to the Colorado Department of Higher Education (CDHE) to hear his/her case.

If a student disputes the University's evaluation of credits from a Colorado private institution, a non-Colorado institution, or a non-regionally accredited institution, the student must file a written appeal with the academic department at CSU-Pueblo within 15 calendar days of receiving the evaluation. If the student fails to file an appeal within the 15-day period, the decision made in the transfer evaluation will be binding.

The Academic Department will have 30 calendar days to review the appeal and notify the student in writing of the decision including the rationale for the decision. In addition, the student will be notified in writing about the process for appealing and the appeal decision should the student feel that reasonable doubt exists.

If the Academic Department fails to inform the student of the available appeal options, the appeals decision shall be null and void. The student's request prevails and cannot be overturned by any institutional administrator or committee.

A student may appeal the first appeal decision in writing to the Dean of the College in which the Academic Department is housed. The appeal must be filed within 15 calendar days of the postmark date of the letter from the Academic Department regarding the first appeal decision.

The University must hear and reach a decision on the appeal within 15 calendar days after the appeal is filed. The student will be notified in writing by the University of the decision regarding the appeal and the rationale for the decision. In addition, the student shall be informed in writing about the subsequent process for appealing the institutional transfer decision, if the student chooses to do so.

The student may appeal the institutional decision to the CSU-Pueblo Provost. The appeal must be filed within five (5) calendar days of the postmark date of the letter notifying the student of the institutional decision. If the student fails to file an appeal within this time period, the institutional decision shall be binding.

The Provost shall review and reach a decision on the appeal within five (5) calendar days after the appeal is filed. The student will be notified in writing of the decision regarding the transfer appeal and the rationale for the decision. In addition, the institution shall inform the student that the decision may be appealed further by writing to the Colorado Department of Higher Education (CDHE). The appeal must be filed within five (5) calendar days of the postmark date of the letter notifying the student of the vice chancellor's decision.

If a student disputes the decision of petitions from transfer of credit from non-accredited institutions, the student must file a written appeal with the Dean of the College who denied the petitions within 15 calendar days of receiving the petition denial. If the student fails to file an appeal within the 15 -day period, the decision made in the petition process will be binding.

The Dean of the College will have 30 calendar days to review the appeal and notify the student in writing of the decision including the rationale for the decision. In addition, the student will be notified in writing about the process for appealing and the appeal decision should the student feel that reasonable doubt exists.

If the Dean of the College fails to inform the student of the available appeal options, the appeals decision shall be null and void. The student's request prevails and cannot be overturned by any institutional administrator or committee.

A student may appeal the first appeal decision in writing to the Provost. The appeal must be filed within 15 calendar days of the postmark date of the letter from the Dean of the College regarding the first appeal decision.

The University must hear and reach a decision on the appeal within 15 calendar days after the appeal is filed. The student will be notified in writing by the University of the decision regarding the appeal and the rationale for the decision. The decision is final with regard to the petition for the acceptance of transfer credit from non-accredited institutions.

## DEGREE-PLUS (SECOND BACCALAUREATE DEGREE)

Students seeking a second undergraduate degree must meet all residency and major requirements. This includes a minimum of 30 credits in residency at CSU-Pueblo. Degree-plus students are considered to have satisfied General Education requirements by virtue of the work completed for their first undergraduate degree from a regionally accredited institution. For more information, refer to the Degree Plus (Second Baccalaureate Degree) section in the Academic Policies section of the catalog.

## INTERNATIONAL STUDENTS

Students who are residents of another country must submit the following to be admitted to CSU-Pueblo:

1) The official international application for University admission, accompanied by a $\$ 30$ fee for undergraduate admission or $\$ 35$ fee for graduate admission; or a $\$ 30$ fee for English as a Second Language students.
2) Two official transcripts of all work completed either in high school or in college (or the equivalent). One transcript must be in the native language, one in

English. Both must show courses taken, grades earned, length of classes and length of school terms. All transcripts must bear the official seal of the issuing institution and must be sent by that institution directly to the Center for International Programs. An explanation of all transcript terminology must be included;
3) Results of an English language proficiency test. Firsttime freshmen students: A minimum score of $\mathbf{5 0 0}$ on the Test of English as a Foreign Language (TOEFL) paper-based test, a minimum score of 173 on the TOEFL computer-based test, a minimum score of 61 on the TOEFL internet- based (iBT), a minimum score of $\mathbf{8 0}$ on the Michigan Test of English Proficiency, a minimum band score of 5.0 on the International English Language Testing System (IELTS) test, or completion of the advanced level at CSU-Pueblo's English Language Institute (with ELI Director approval) is required. Transfer students: A minimum score of $\mathbf{5 0 0}$ on the Test of English as a Foreign Language (TOEFL) paper-based test, a minimum score of 173 on the TOEFL computer-based test, a minimum score of 61 on the TOEFL internetbased (iBT), a minimum score of 80 on the Michigan Test of English proficiency, or a minimum band score of 5.0 on the International English Language Testing System (IELTS) test is required. In addition, transfer students must have an overall cumulative grade-point average of 2.300 or above. English language proficiency tests are not required of students from countries where English is the native language.
4) A financial statement regarding the resources available to the student during his or her stay in the United States. An international student cannot be accepted without this statement.

The Center for International Programs reserves the right to change policy. Exceptions are at the discretion of the Vice-President of Student Services and Enrollment Management

No international student application for admission will be considered until all required materials are complete. The Center for International Programs must receive all materials by the application deadlines.

## INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM

See Credit by Examination (Academic Policies section).

## RETURNING STUDENTS

Students who have been enrolled and received a grade notation in a course (see Academic Policies for grade notations), but whose attendance was interrupted for two or more regular semesters, excluding summer, are required to file an application for readmission by the
admissions deadline of the term in which they wish to enroll. Students seeking readmission must submit a $\$ 25$ reapplication fee (non-refundable). Students applying after the application deadline for Fall or Spring must also pay the $\$ 25$ Late Application Fee (non-refundable) in addition to the $\$ 25$ Application Fee. Students whose previous CSU-Pueblo work resulted in a cumulative grade point average below 2.000 ("C") must also provide a written statement detailing the previous academic difficulties, the student's plans to overcome these difficulties and any other pertinent information to assist the admissions committee in making a decision.

Students, who are re-admitted after an absence of two or more semesters, excluding summers, are governed upon readmission by the catalog current at the time of readmission. Any college credit earned more than 10 years before the date of admission or readmission is not applicable toward the degree desired unless it is approved by the appropriate department chair. This policy includes transfer credit previously accepted by CSU-Pueblo. This policy does not apply to general education courses. Any exceptions to the policy must have prior approval from the Provost. Degree-seeking students who have attended another post-secondary institution or have taken collegelevel correspondence or extended studies courses must provide complete official transcripts of such studies.

## ACADEMIC RENEWAL

Undergraduate students who return to Colorado State University-Pueblo after an absence of at least three years and whose cumulative CSU-Pueblo grade point average is below 2.000 are eligible for academic renewal. Students who take advantage of the Academic Renewal Policy will not have grade-point averages carried forward upon readmission. Courses with an earned grade of $C$ or better are eligible to count toward graduation. Students must be currently enrolled for academic renewal to be processed. Academic renewal will not be granted more than once.

Any college credit earned more than 10 years before the date of readmission is not applicable toward the degree desired unless approved by the chair of the department offering the course(s) [or equivalent(s)].

Students who elect academic renewal will be required to complete at least 30 hours of credit after readmission before they are eligible for a baccalaureate degree.

Students who have been granted Academic Renewal must complete 60 semester credits with CSU-Pueblo after the Academic Renewal designation to qualify for graduation with scholastic honors.

The Academic Renewal Application can be obtained from the Records Office.

## NON-DEGREE STUDENTS

Students may enroll at Colorado State University-Pueblo as a non-degree seeking student in one of the following categories:

## Guest Student - No Credit

Applicants who wish to register as a guest (no credit) without degree-seeking status should contact the Office of Admissions for current policies and procedures.

A guest (no credit) student may carry up to 6 hours per term. A guest (no credit) student is ineligible for financial aid. In place of a grade for each course, students receive the symbol NC (no credit) on their transcripts.

## Guest Student - For Credit

Guest (for credit) student category is reserved for applicants who wish to enroll in courses without degreeseeking status. Applicants who wish to register as a guest (for credit) student must be Colorado residents and are required to complete a short application with the Office of Admissions each term that they wish to enroll. Guest (for credit) students are NOT REQUIRED to submit official transcripts, test scores or an application fee; however test scores or a transcript will be required to enroll in an English or Math course. Tuition and fees are based on the number of credits for which they register and are INELIGIBLE to receive financial aid. A guest (for credit) student may carry up to 15 hours per semester and may earn a maximum of 30 semester hours while maintaining visiting status. A guest (for credit) student must maintain a 2.000 cumulative grade-point average. Guest (for credit) students who wish to exceed the 30 -semester hour maximum must formally apply for admission. For information on Guest (for credit) Student Status for graduate students, see Graduate Programs section in catalog.

## High School University Program

Under Colorado's Concurrent Enrollment and ASCENT Programs, high school students may register for classes at the University based on the availability of existing Concurrent Enrollment and ASCENT agreements. Information on these programs is available in the CSUPueblo Office of Admissions and at participating high schools.

The University also offers a Senior-to-Sophomore (STS) program by agreement with various high school districts. High school students in this program are afforded the opportunity to study in university level courses while remaining in their high school classrooms and are considered unclassified students by the University. Students must submit an application for admission,
transcript of their high school record and ACT or SAT scores. Those STS students who are in their senior year are given consideration for admission as regular first-time students for the fall semester following their high school graduation. Students interested in this program are encouraged to seek information from their high school guidance counselor or from the University's Office of Continuing Education at 719-549-2316.

## Senior Citizens

Persons 65 years of age or older, or 62 and retired, may audit courses on a space-available, non-degree student basis without paying tuition. Permission of the instructor is required. A grade of NC (no credit) will be posted.

## RESIDENCY CLASSIFICATION

Your initial residency classification at Colorado State University-Pueblo is determined by the Office of Admissions based on information you provide in the Residency Section of the CSU-Pueblo Admissions Application. This initial residency classification remains the same unless you meet the domicile requirements for Colorado residency, you submit a "Petition for In-State Tuition Classification" which supports your domicile, and your petition is approved.

If you have been classified as a non-resident and believe you qualify for Colorado residency, it is important to do the following:

- Obtain a "Petition for In-State Tuition Classification" in the Admissions Office; and
- Submit a completed petition by the deadline.

Colorado residency for tuition purposes for the state of Colorado is governed by State Law (Title 23, Article 7, of the Colorado Revised Statutes of 1973, as amended) and by judicial decisions that apply to all public institutions of higher education in Colorado and is subject to change at any time. The residency decision made at one Colorado institution is non-transferable to other Colorado institutions. Colorado State University-Pueblo must apply the rules set forth in the residency statutes and is not free to make exceptions to the rules except as specifically permitted by State Law.

## Qualified Individuals

## Parent Petitioners

Parents who have moved to Colorado and meet the domicile requirements may submit a "Petition for In-State Tuition Classification" which supports their domicile. If their petition is approved, their dependents are eligible for Colorado residency.

## Other Qualified Individuals

You are a qualified individual and eligible to establish domicile separate from your parents if, at the beginning of the 12-month domicile year, you were:

- At least 22 years old, or
- Married, or
- Emancipated, or
- A graduate student

An emancipated minor is an individual under 23 years of age who is no longer considered a dependent and is not supported by their parent(s) or any other individual. An emancipated minor can begin establishing their domicile on the date they become emancipated.

Emancipation must be proven in the following way:

- Parents or other individuals must no longer provide financial support of any nature for any purpose. Parental support includes funds your parents may have previously set aside for your current support even if those funds are in your name.
- Parents must no longer claim the minor on their federal and state income tax returns.
- If the minor takes out a loan, they must do so without a parent co-signer. In addition, the loan must not be the student's major source of support.
- The minor must document that they are independently able to meet all financial obligations without any financial help from any other individual.

Examples of financial obligations may include:

- Tuition and fees
- Rent and food
- Medical expenses, including health insurance
- Vehicle expenses, including insurance

If you are granted Colorado residency as an emancipated minor, you must continue to independently meet all your financial obligations, including the cost of education, without financial assistance from your parents or any other individual.

## Court Appointed Legal Guardian

A student may qualify for Colorado residency based on the domicile of their court appointed legal guardian if the guardianship has been in effect for at least one year. The legal guardian must provide court documents certifying that the primary purpose of the appointment is other than to qualify the student for Colorado residency. The court must also certify that the student's parents do not provide financial support.

## RESIDENCY REQUIREMENTS

## Domicile

"Domicile" is used to describe the place where an individual has demonstrated intent to make a permanent home and legal residence. Both physical presence (see \#1 below) and evidence of intent (see \#2 below) must be in place to begin the domicile year. A qualified individual must reside in Colorado with the intent to make Colorado their permanent home and legal residence.

Colorado residency requires a domicile in Colorado for 12 continuous months on or prior to the first day of classes of each semester.

Since domicile is defined as a permanent home and legal residence, being in Colorado solely for school purposes and/or temporarily for other purposes does not qualify as domicile for Colorado residency.

1) Physical presence is your actual permanent home and legal residence. Proof of physical presence may include all of the following:

- Home ownership
- Lease agreement
- Rent receipts
- Notarized statement from a landlord

2) Evidence of intent to make Colorado your permanent home and legal residence is demonstrated by giving up all your legal ties with your prior state and establishing them with Colorado for 12 continuous months. Proof that demonstrates evidence of intent, as specified by the residency statute, may include all of the following:

- Colorado driver's license or valid Colorado ID.

If you have a driver's license from another state, you must apply for a Colorado driver's license within 30 days of moving to Colorado (if you are employed) or within 120 days (if unemployed). If you do not drive, you may obtain a Colorado identification card.

- Colorado motor vehicle registration.

If you operate a motor vehicle, you must register it in Colorado within 30 days of moving to Colorado (if employed) or within 120 days (if unemployed). This law applies to any vehicle you have, whether or not you are the registered owner.

- Permanent, full-time, off-campus employment or acceptance of future permanent employment in Colorado.
- Colorado voter registration.

You may register to vote with your county clerk, or when you obtain your Colorado
driver's license. Although voting is not required by law, it is nonetheless an indicator of one's intent to create a Colorado domicile.

- Change in permanent address on all pertinent records.
- Payment of Colorado state income tax (if your income is sufficient to be taxed).

All taxable income accrued after you move to Colorado, regardless of source, must be reported to the Colorado Department of Revenue. You should file part-year resident returns for each state of residence for the year you move to Colorado. For subsequent years, you should file a full-year resident Colorado return.

- Withholding of Colorado state taxes from wages.
- Ownership of residential property in Colorado that is your primary residence.
(Ownership of vacation or income property is not an indication of domicile.)

Evidence of legal ties outside of Colorado during the domicile year that demonstrate residency in another state may include the following:

- Failure to file a Colorado state income tax return.
- Failure to pay Colorado state income tax (if your income is sufficient to be taxed).

Income earned in another sate by a resident of Colorado is taxable in Colorado. Filing a nonresident Colorado tax return is persuasive evidence of domicile outside Colorado.

- Failure to obtain a Colorado driver's license or Colorado ID.
(Failure to change your driver's license to Colorado within the statutory periods.)
- Maintenance of a home in another state.
- Prolonged absence from Colorado.
- Residing in another state between academic terms or when not enrolled as a student.
- Vehicle you operate is registered in another state. (Failure to register a motor vehicle in Colorado within the statutory periods.)
- Any other factor unique to the individual who tends to imply your permanent home and legal residence is in another state.

The fact that an individual does not qualify for residency in any other state does not guarantee Colorado residency.

## STUDENT BILLING SERVICES

## STUDENT BILLING SERVICES

Student Billing Services is a resource for students and parents seeking information on tuition and fees, COF, billing questions, tuition appeals, payment plans, and 1098-T's. Students may obtain information from Student Billing Services in the Administration Building, Room 212 or by calling 719-549-2937.

## TUITION AND FEES

## Tuition and fee rates are on-line at

## http://www.colostate-pueblo.edu/BFS/TuitionFees

Tuition rates are established by the Board of Governors of the Colorado State University System following budget action of the Colorado General Assembly. The Board of Governors normally acts on tuition and fee (course, program, and department) charges at a meeting prior to the start of the academic year. The Student Fee Governing Board (SFGB) is the body at Colorado State University-Pueblo responsible for recommending Permanent Student Purpose Fees (mandatory fees). There may be other fees associated with a student enrolled at the University. All fees and charges are subject to change. Go to your TWOLF Student Portal and then log into PAWS to view billing information.

A payment plan is available. Students can pay in three installments but will be assessed $1.5 \%$ interest on any outstanding balance each month. Bills are NOT mailed, so students must review their bill on-line by accessing their PAWS account.

## COLLEGE OPPORTUNITY FUND

The College Opportunity Trust Fund (COF), created by the Colorado Legislature, provides a stipend to eligible undergraduate students. The stipend pays a portion of your total in-state tuition when you attend a Colorado public institution or a participating private institution. Eligible undergraduate students must apply at https://cof.college-assist.org, be admitted and enroll at a participating institution. Both new and continuing students are eligible for the stipend. Qualifying students may use the stipend for eligible undergraduate classes. The stipend is paid on a per credit hour basis to the institution at which the student is enrolled. The credit-hour amount will be set annually by the General Assembly. Basic skills courses are not covered by COF. If COF tasks are not completed by the end of the semester, students will be responsible for payment of the COF portion as well as the student share.

## PARKING

Parking decals are required to park on campus and can be obtained at the Cashier's Office in the Administration Building or in the Auxiliary Services Office in the Occhiato Center. Visitor parking passes can be obtained in the Sheriff's Office in the Administration Building. Temporary (Staff and Concurrent Student) parking passes can only be obtained at the Cashier's Office in the Administration Building.

## DELINQUENT STUDENT ACCOUNTS

Students are subject to any or all of the following actions if they have a delinquent debt to the University:

- Inability to view grades
- Administratively withdrawn
- Diplomas and transcripts held (official and unofficial)
- No future course registrations allowed
- Turned over to a collection agency

Reasonable collection/legal costs will be added to the amount due. Any student who pays with a check that is returned unpaid by his/her bank will be subject to all of the penalties for late payment and also will be charged an additional $\$ 25$ fee.

## TUITION APPEALS

The Tuition Appeals Committee will consider requests for adjustment to tuition and fee charges when a student can document extenuating circumstances. Appeals must be made no later than thirty (30) days past the end of the term in question. The Appeals committee meets only once a month. Appeal forms can be obtained by contacting Student Billing Services in the Administration Building.

No adjustment/refunds of tuition and fees will be made to a student who is suspended, dismissed or expelled for a breach of discipline.

## FINANCIAL AID

Financial aid is a resource for students and parents seeking monetary assistance to help defray the costs of higher education. Eligible students who demonstrate financial need may receive assistance from the federal government and/or the State of Colorado in the form of grants, loans, work study and/or scholarship funds. Students may obtain information from Financial Aid, Administration Building, Room 212, telephone (719) 5492753. Students may obtain further financial aid information by logging onto http://www.colostate-pueblo/FinancialAid

The primary responsibility for educational costs resides with the student and the student's family. Assistance offered through financial aid is intended to supplement the family contribution. Funds are awarded on a first-come, first-served, need basis.

## Financial Aid Application Steps

1) Complete a Free Application for Federal Student Aid (FAFSA) by March 1. Students may apply online at http://www.fafsa.gov. The CSU-Pueblo school code is: 001365
2) Complete the CSU-Pueblo Scholarship application by March 1. Students may apply online at:
http://www.colostatepueblo.edu/FinancialAid/Scholarships
3) Students can view their application status and other required documents on CSU-Pueblo's Personal Access to Web Services (PAWS). Once all required information is received, students will receive a financial aid award offer, which can be viewed through the PAWS account.

Students may not receive financial aid if they are:

1) Not enrolled in a degree-seeking program;
2) On financial aid suspension, ineligible SAP status, or academic suspension;
3) In default on a federal student loan;
4) Owe money back on a federal student grant or federal loan over aggregate or have not made satisfactory arrangements to repay it; or
5) Ineligible non-citizens or not permanent residents of the United States.

## FINANCIAL AID POLICIES

## STUDENT RIGHTS AND RESPONSIBILITIES

As a student at CSU-Pueblo you have the right to:

- Know all the types of financial assistance available to our students, including federal, state, and institutional sources.
- Change or decline any financial aid awarded.
- Appeal financial aid eligibility, including a financial aid award.


## As a student at CSU-Pueblo you have the responsibility to:

- Accurately and honestly complete the Free Application for Federal Student Aid (FAFSA) and CSU-Pueblo School Application each year by the priority deadline of March 1.
- Use financial aid solely for expenses related to attendance at CSU-Pueblo.
- Be admitted in a degree-seeking program in order to receive financial aid.
- Maintain at least 6 credit hours of enrollment per semester to receive financial aid.
- Keep your address updated with Financial Aid.
- Notify Financial Aid if you are attending two schools at the same time. (You may not receive financial aid at two schools at the same time.)
- Read and understand the Satisfactory Academic Progress Policy, the Withdrawal Policy, and other general policies related to financial aid.
- Officially withdraw from CSU-Pueblo if you are unable to attend classes.
- Report all scholarships that you receive to Financial Aid. (All scholarships are counted as part of your financial aid and may impact other financial aid.)
- Review disbursement schedules that are published.
- Pay any balance to CSU-Pueblo that is not covered by financial aid.
- Monitor your CSU-Pueblo e-mail account for important financial aid information.
- View your balance due, financial aid award, and other individual student information via PAWS.


## SATISFACTORY ACADEMIC PROGRESS POLICY

As a standard for participating in any federal student aid program, CSU-Pueblo is required by the U.S. Department of Education to apply reasonable standards for measuring whether a student is making progress toward a degree. The state of Colorado also requires that students meet Satisfactory Academic Progress (SAP) in order to receive any state-funded student assistance. Both of these requirements are met and apply to CSU-Pueblo institutional financial aid eligibility by measuring student academic performance at the end of each payment period (period of enrollment) against the following qualitative and quantitative standards:

## Cumulative Grade Point Average (GPA)

2.0 for undergraduate programs, 3.0 for graduate programs.

## Completion Percentage (Pace)

At least $75 \%$ of all credit hours attempted must have successfully passing grades (all students must complete coursework with successfully passing grades by the end of each period of enrollment or put both current and future financial aid eligibility at risk). Successfully passing grades are S or D- and higher; all others (U, F, W, IN, IP, NC, and repeated coursework - see below) count as unsuccessful credit hours attempted.

Course repetition: Students are allowed to repeat a course and have it count toward enrollment for financial aid eligibility only once. Each attempt at the course, however, will count toward a student's pace, and all prior attempts with lower grades will count as unsuccessful credit hours attempted. Please note this is specifically in reference to repeating identical coursework at CSUPueblo. Credits accepted as transfer credits that may count as equivalent to coursework offered here at CSUPueblo do not count as course repetition.

Withdrawals: Withdrawals do not affect a student's cumulative GPA for SAP, but count as credit hours attempted toward both pace and maximum time frame. Please note that a withdrawal (grade of W") has great distinction from courses which are simply dropped (no grade and no record of attempt).

Incompletes: At the time of evaluation (the end of each period of enrollment), Incompletes (grade of $-\mathbf{N}$ ") do not affect a student's cumulative GPA for SAP, but count as credit hours attempted toward both pace and maximum time frame. Students with grades of Incomplete which become new letter grades prior to or during a subsequent period of enrollment and that may affect financial aid eligibility for that period of enrollment can contact Financial Aid for further evaluation.

Transfer credits: Transfer credits do not count toward a student's cumulative GPA for SAP, but do count as both attempted and completed credit hours (100\%) toward pace and maximum time frame.

## Maximum Time Frame

Undergraduate students - attempted credit hours may not exceed $150 \%$ of the educational program

Graduate students - attempted credit hours may not exceed $100 \%$ of the educational program

Note that both Pace and Maximum time frame are measured in credit hours only, regardless of full time or part time attendance.

All students enrolled at CSU-Pueblo are evaluated for SAP at the end of each period of enrollment, after the

Records office has released official grades. Students can find their SAP status within the Financial Aid menu on PAWS. Listed here you will find each status and definition:

- Eligible - Student is eligible for financial aid. This category may include students with no SAP issue at all, students who have appealed successfully and have successfully completed their Probation period of enrollment, students who have successfully completed their Probation period of enrollment and are following their Academic Plan, and students who have met SAP after being Ineligible previously.
- Warning - Failure to make SAP, but student is financial aid eligible for one more period of enrollment and must make SAP by the end of that period of enrollment or financial aid eligibility will be suspended. Warning status is not appealable.
- Suspended - Failure to make SAP after a Warning period, but student is eligible to appeal. If the appeal is approved, the student can continue financial aid eligibility for another period of enrollment under a Probation status. Students may also choose not to appeal and attempt to regain financial aid eligibility by meeting SAP while paying out of pocket (without any financial aid).
- Probation - Failure to make SAP, but appeal is approved and student is financial aid eligible for one more period of enrollment, or possibly more if following required Academic Plan (which may include documentation requirements not directly related to academic performance).
- Ineligible - Failure to make SAP and/or failure to follow required Academic Plan. This status also applies to appeals that are not approved - the student is not eligible for financial aid until cumulative SAP standards are met and may not appeal.


## Appeal Procedure

All students who have their financial aid eligibility suspended may appeal to the Financial Aid Committee to receive financial aid in a subsequent period of enrollment. GPA, Pace, and Maximum time frame are all appealable. There is no form to complete, and contacting Financial Aid is not required, but you may visit a Financial Aid Counselor during our walk in business hours (8:00 a.m. 5:00 p.m., Monday - Friday). Appeals must be in a written format, and:

- Have student printed name, PID, daytime contact information, and signature;
- Have Academic Advisor name, department, and contact information;
- Include information describing why SAP minimum standards have not been met and how the situation has changed so that SAP will be met at next evaluation;
- Detail any extenuating circumstances, including supporting documentation from a 3rd party (e.g., police reports, detailed hospital bill or physician's statement, death certificate, etc.);
- Include enrollment plans for next period of enrollment (e.g., number of credit hours, change in major, Academic Improvement Plan details, any other academic-related documentation, etc.); and
- Be complete and turned in to Financial Aid by the following priority deadlines for each period of enrollment:
- July 1 for Fall semester
- Monday before classes begin for Spring semester
- June 1 for summer session

Absolutely no appeals will be reviewed for a period of enrollment which has already begun.

Students are notified of their SAP appeal decision via their PAWS account. Financial Aid Committee decisions are final. Students whose appeals are not approved may reestablish financial aid eligibility only by meeting the SAP cumulative standards. Students may appeal SAP only once during their entire enrollment at CSU-Pueblo.

## Academic Plans

All students who appeal successfully and are subsequently placed on Probation will automatically have a minimum Academic Plan consisting of at least 2.0 GPA and $75 \%$ completion rate (3.0 GPA and 100\% completion rates for graduate students) within subsequent periods of enrollment. The Financial Aid Committee will further develop Academic Plans for individual students based on the particular situation and content of appeal on a case by case basis. The requirements of these more rigorous plans will be made in writing and signed by the student prior to a subsequent financial aid disbursement, and the Academic Plans will be monitored by the Financial Aid Committee or designee.

Note that the SAP policy differs from CSU-Pueblo's Good Academic Standing policy (see Catalog), and in particular the difference between an SAP Academic Plan and a Student Academic Services Academic Improvement Plan. The SAP policy reviews both Pace and Maximum time frame, in addition to GPA, and all attempted credit hours are included in reviewing student eligibility, including those excluded by the Records office in Academic Renewal situations. These two policies also have separate appeal procedures.

This SAP policy is effective July 1, 2011, and supersedes all other CSU-Pueblo SAP policies published on the web and/or in prior catalogs.

## OFFICIAL WITHDRAWAL POLICY

Students who totally withdraw from the University, for any reason, when it is passed the drop period, must initiate the Official Withdrawal process by contacting Student Academic Services. A withdrawal from the University is not considered official until the following three required steps are completed:

1) Students must obtain an Official Withdrawal Form from Student Academic Services.
2) Students must speak with a Financial Aid Counselor in Financial Aid.
3) Students must turn in the Official Withdrawal Form with all required signatures from the above named offices to the Records Office to finalize the withdrawal.

This process ensures proper notification of instructors for grading purposes. Students who do not complete the Official Withdrawal process will potentially receive all failing grades on their transcripts and will be required to repay their unearned federal financial aid based on 50 percent of the semester unless they can provide acceptable documentation proving they were in attendance passed 60 percent of the semester. Total withdrawals will not be processed after the last scheduled class day of the semester.

Please note that Official Withdrawal will affect the degree completion rate of the student and may affect their eligibility for financial aid. Please review the University's Satisfactory Academic Progress Policy (SAP) at: http://www.colostatepueblo.edu/FinancialAid/GeneralPolicies/SatisfactoryAcad emicProgressPolicy/

Students who totally withdraw from the University after the drop period through 60 percent of the semester will have their tuition and fees prorated. A federal formula is used to determine the amount of federal financial aid earned by the student, which will be calculated for students who withdraw within 60 percent of the semester based on the percentage of the semester completed. If the student received less assistance than the amount earned, the student may be able to receive those funds. If the student received more assistance than earned, the excess funds must be returned. The amount of federal financial aid unearned will be deducted from the adjusted tuition and fee amounts credited to the student's account; however, there may be additional institutional charges that were not covered by federal financial aid and will be reflected in the total amount owed by the student. Students may use the following calculation to estimate the amount of Title IV aid he or she earned prior to the withdrawal date.
\# of days student completed*/total \# of days in period of enrollment $=$ percentage of aid earned
*Scheduled breaks of five or more days will be excluded from calculation.

Students who complete an Official Withdrawal after 60 percent of the period of enrollment will not have their tuition and fees adjusted or the federal financial aid received adjusted. Please note that federal financial aid received may not cover the total amount of institutional charges owed by the students. Students can review their account balance through their PAWS account.

Students who complete Official Withdrawals within 60 percent of the period of enrollment and did not receive federal financial aid will have their tuition and fees prorated based on the day the Official Withdrawal was initiated by the student through the office of Student Academic Services.

Students who cease attendance from the University and drop all courses during the drop period will receive a 100 percent tuition refund and will be responsible for repaying all of their federal financial aid funds received back to the University. Students are not eligible to receive federal financial aid when they have dropped all courses and no longer attend. Please review the Financial Aid Policies for more information.

## FINANCIAL AID PROGRAMS

## GRANTS

All grants are listed on our webpage: http://www.colostatepueblo.edu/FinancialAid/Grants. The following are three common need-based funds.

## Federal Pell Grant

The Federal Pell Grant amount is determined by the Expected Family Contribution (EFC) listed on the Student Aid Report and whether the student is enrolled full-time or part-time. Generally, Pell Grants are awarded only to undergraduate students. In some cases, students might receive a Pell Grant for attending a post-baccalaureate teacher certificate program.

## Colorado Student Grant (CSG)

Generally the CSG is for full-time undergraduate students and is awarded to Colorado residents on the basis of financial need as determined by the Colorado Commission on Higher Education. Funds are provided by the Colorado General Assembly.

## Federal Supplemental Education Opportunity Grant (FSEOG)

The FSEOG is designed to assist undergraduate students with exceptional need, targeted to Federal Pell Grant
recipients and other exceptional need students. Awards may not exceed $\$ 4,000$ per year.

## STUDENT EMPLOYMENT/ WORK STUDY

Work study provides part-time jobs to students. The program provides students with meaningful work experience, preferably related to their academic major. Students may use work study funds to supplement their income and help meet educational expenses. The program is funded by both the federal government and the Colorado General Assembly. The University annually employs approximately 450 students in the Student Employment program.

## General Qualifications:

1) Must be enrolled at the University as a degreeseeking student.
2) Must be making satisfactory academic progress.
3) Must enroll in and maintain six (6) credit hours for each term employed.

## Colorado Work Study

The Colorado work study program is funded by the Colorado General Assembly. To be eligible, students must be undergraduate Colorado residents.

Students must complete the Free Application for Federal Student Aid (FAFSA) to determine eligibility for work study. Students are selected for the program if qualifications are met and if funds are available. Generally students must demonstrate financial need, but the University is allowed to award a portion of the Colorado work study funds to students who have little or no financial need.

## Federal Work Study

The federal work study program is funded by the federal government. To be eligible, students must demonstrate financial need.

Students must complete the Free Application for Federal Student Aid (FAFSA) to determine eligibility for work study. Students are selected for the program if qualifications are met and if funds are available. Students may work on campus or at off-campus community service designated sites and must be enrolled in undergraduate or graduate programs.

## Full-Time Summer Work Study

Full-time work study is a program designed to provide students with employment during the summer. The award is considered part of the annual financial aid award offer. Continuing and new students must be enrolled for the
following fall semester. New students may not begin working until June 1.

Students are not required to enroll for summer courses to qualify for full-time summer work study. However, students who are not enrolled in at least three (3) credit hours must contribute to the Student Employee Retirement Plan ( $7.50 \%$ ) and Medicare ( $1.45 \%$ ) for each pay period.

## STUDENT LOANS

Prior to any federal education loan being processed by CSU-Pueblo, the applicant must complete the financial aid application process.

## Federal Perkins Student Loan

The Federal Perkins Loan is a low-interest (5\%) loan to help exceptionally needy students pay for post-secondary education. CSU-Pueblo must disclose the loan disbursement and default status to a credit bureau organization.

Students may be eligible to borrow up to a total of:

- $\$ 5,500$ a year as an undergraduate if they are enrolled in a degree program, leading to a bachelor's degree;
- $\$ 8,000$ a year as graduate students enrolled in a master's degree program;
- $\$ 20,000$ aggregate if they are undergraduates working toward a bachelor's degree; or
- $\$ 40,000$ aggregate for graduate or professional study (total includes any amount borrowed under Federal Perkins Loan or NDSL for undergraduate study).

Repayment of the loan begins nine months after students cease to be enrolled half-time. Students may be allowed up to 10 years to repay the loan. The amount of payment depends upon the size of the debt and the length of your repayment period.

In case of default on a Federal Perkins Loan, which the University is unable to collect, the federal government may take action to recover the loan. Questions about the terms of the loan, repayment obligations, deferment or cancellation should be directed to the University's Perkins Loan Servicer, ECSI, at 1-888-549-3274.

## Federal Direct Loans

The U.S. Department of Education administers several loan programs designed to offer low-interest funding to students and their parents who need to borrow money to cover the costs of education. Below is a summary of the loans available:

Direct loans are either subsidized or unsubsidized. A subsidized loan is awarded on the basis of financial need. The federal government pays the interest while the student is in school.

An unsubsidized loan is not awarded on the basis of need. You'll be charged interest from the time the loan is disbursed until it's paid in full. If you allow the interest to accrue while you're in school or during other periods of nonpayment, it will be capitalized-that is, the interest will be added to the principal amount of your loan, and additional interest will be based on that higher amount.

The Federal Direct Loan Program is intended solely to aid students pursuing a degree in higher education. Students should borrow only the amount they believe is necessary to pay for educational costs. Keeping the amount of a loan at a minimum will ease repayment.

## Student Loan Amounts

The unsubsidized Loan interest rate is at a fixed rate of $6.8 \%$. You'll be notified of interest rate changes throughout the life of your loans.

You'll pay a fee of up to $4 \%$ of the loan, deducted proportionately from each loan disbursement.

## Annual Loan Limits for Direct Loans

|  | Dependent <br> Undergraduate <br> Student | Independent <br> Undergraduate <br> Student |
| :--- | :--- | :--- |
| 1st Year | $\$ 5,500-$ only $\$ 3,500$ <br> may be subsidized | $\$ 9,500-$ only $\$ 3,500$ <br> may be subsidized |
| 2nd Year | $\$ 6,500-$ only $\$ 4,500$ <br> may be subsidized | $\$ 10,500-$ only $\$ 4,500$ <br> may be subsidized |
| 3rd \& 4th Years | $\$ 7,500-$ only $\$ 5,500$ <br> may be subsidized | $\$ 12,500-$ only $\$ 5,500$ <br> may be subsidized |
| Maximum Total | $\$ 31,000-$ only $\$ 23,000$ <br> Debt Allowed | $\$ 57,500-$ only $\$ 23,000$ <br> may be subsidized |
|  | may subsidized |  |

*Graduate students may borrow up to $\$ 20,500$ (unsubsidized) each academic year. Aggregate limits are also higher.

## Federal Direct Parent Loan for Undergraduate Students (PLUS)

PLUS enables parents who do not have an adverse credit history to borrow to pay the education expenses of each child who is a dependent undergraduate student enrolled at least half-time. The interest rate is a fixed rate of $7.9 \%$. Credit checks are conducted by the lender to determine loan approval. If the loan is denied the lender is responsible for notifying the parent (borrower).

The borrower (parent) must begin monthly payments of a Federal Direct (PLUS) loan 60 days after the final disbursement of a loan or borrowers may choose to defer payments until 6 months after the date the student ceases half-time enrollment.

## SCHOLARSHIPS

To be considered for any University grant and scholarship aid, students must complete the University Scholarship Application. Also, Financial Aid administers a number of private scholarships funded by individuals, foundations, agencies, and organizations. All CSU-Pueblo students may apply on-line at our webpage: http://www.colostatepueblo.edu/FinancialAid/Scholarships for institutional scholarships by submitting an institutional application by the March 1 deadline. Recipients are selected by various committees.

Students are encouraged to visit http://www.colostatepueblo.edu/FinancialAid/Scholarships for more information about scholarship searches or visit Financial Aid in Administration Building, Room 212.

## Impact on Financial Aid

As a direct resource, scholarships are part of the student's financial aid package. If the student's financial need is already met at the time of scholarship notification, other aid may be reduced or cancelled. Pell grants are never reduced as the result of a scholarship.

## HOW AID IS DETERMINED

Financial need is the difference between the Cost of Attendance (COA) and the expected Family Contribution (EFC). Financial needs can be expressed as an equation:

COA minus EFC equals financial need.

$$
\begin{array}{r}
\text { COA } \\
-\quad \text { EFC } \\
\hline \text { Financial need }
\end{array}
$$

For each student, the COA, EFC, and financial need will be different. Financial aid is offered to help the student cover their financial need depending on specific qualifications and available funding.

The Cost of Attendance includes:

- Tuition \& Fees
- Books \& Supplies
- Room/Board
- Transportation
- Medical and Dental Expenses
- Personal Expenses

The Colorado Commission of Higher Education determines the amount for each budget item. Tuition \& fees are based on actual cost, and the other items are adjusted according to whether you live on-campus, offcampus, or with parents or relatives.

Please also note that the Cost of Attendance may not be exceeded once all federal, state, University, and private (outside) sources of financial aid has been considered. This includes all loans, grants, scholarships, and federal and/or state work study earnings.

## VETERAN EDUCATIONAL BENEFITS

Veterans must follow the admission requirements and procedures outlined in this catalog. For certification of eligibility for education benefits under one of the Public Laws, students can apply for Veterans Administration benefits through the Veterans Education Benefits Office in the Administration Building, Room 201, telephone, (719) 549-2910. Please allow at least two months for processing time.

## BUREAU OF INDIAN AFFAIRS

Students, who are at least one-fourth American Indian, Eskimo or Aleut, as recognized by a tribal group served by the Bureau of Indian Affairs, may apply for a BIA grant. The amount awarded is based on financial need and availability of funds from the area agency. For additional information, write to: Scholarship Office, U.S. Department of the Interior, Bureau of Indian Affairs, P.O. Box 370, New Town, ND 58763.

## STUDENT SERVICES

## CAMPUS LIFE, STUDENT ENGAGEMENT AND DEVELOPMENT

## STUDENT SERVICES

The University operates a number of offices, facilities, programs, and organizations that exist primarily to enhance and support students' academic and co-curricular experiences at the University.

Opportunities! That is what we all seek from our college experience.

Opportunities to meet others with similar interests; opportunities to learn, grow, explore, and enjoy the world around us; opportunities to discover new and exciting horizons, to make friendships, to think about issues, to take on leadership roles, to take action; and perhaps more importantly, opportunities to make a difference.

Our Student Services programs are here to help you get involved and to enhance your college experience! We can help open the door to opportunity.

## Vision

Student Services will be a driving force that furthers the University's goals for learning and success by offering exemplary programs that welcome, support, and challenge students. Through its collaborative and student-centered programs, the division will maximize opportunities for student growth, lifelong learning, and citizen leadership in an increasingly diverse and technological world.

## Student Services

Occhiato Student Center, Room 003
http://www.colostate-pueblo.edu/studentlife/
Phone: 719-549-2586

## STUDENT ENGAGEMENT, LEADERSHIP, AND INVOLVEMENT PROGRAMS

## ASSOCIATED STUDENTS' GOVERNMENT

The Associated Students' Government (ASG) is the students' governing body and promotes student life and the general welfare of the student body. It also addresses student concerns and/or complaints regarding any campus issue. ASG works to make students aware of administrative decisions on campus by having Senators as representatives on most of the boards and committees on campus.

ASG functions through three branches of government: Legislative, Executive, and Judicial. The Legislative branch, the ASG Senate, is composed of 14 senators elected from the student body. It is presided over by the

Speaker. The Executive branch consists of the President and the Vice President. The Judicial branch is composed of up to five justices, one of whom is designated the chief justice. The senate meets weekly. Contact (719) 549-2866 for more information.

## RESIDENCE LIFE AND HOUSING

Live, learn, and enjoy the opportunities of a lifetime in campus housing. Living on campus can be an enriching experience and a great way to ensure success.

The residence halls are home to more than 900 students. The University Housing Office is located in the Belmont Residence Hall. The standard floors in the residence halls are co-ed; however, there are floors designated for men or women only. Cleaning services are provided for all common areas.

Most of the residence hall rooms are designed for two people. Depending upon the building, there are single rooms, double rooms with a bathroom, and single room suites available. All of the rooms come with a bed, dresser, desk and desk chair. Each room has cable and internet access-either Ethernet or wireless. All front desks are staffed 24-hours by student staff to answer questions and check out equipment.

## Live-in Requirement

All single freshmen under the age of 21 with a home address of more than 50 miles from campus must live in University housing. Single freshmen under the age of 21 whose parents' principle residence is located within 50 miles of campus may elect to reside in University housing but otherwise must reside with their parents. Students eligible to live with their parents will be required to provide written documentation verifying they are electing to live with their parents.

Students required living in University residence hall housing will be defined as having fewer than 24 college or university credit hours and being under 21 years of age. Credits taken concurrent with high school and/or credits attained through Advanced Placement (AP) examination, CLEP, International Baccalaureate or similar programs do not apply towards the housing requirement.

All residential students are required to have a meal plan. Students failing to meet these requirements will be assessed the lowest priced residence hall (double room rate) and board (meal plan) charges.

Any exceptions to this requirement must be approved by the University Housing Office.

## Residence Hall Association

Residence Hall Association (RHA) is a student organization within the residence halls with a focus on student programming. Being involved in RHA can be as easy as being a floor representative in your hall. Each hall has a hall council which works with the executive board of RHA to do programming for all halls. Being in RHA also allows the opportunity to attend regional and national conferences and the ability to network with other students across the nation. Involvement in RHA is a good opportunity for students to build networking and leadership skills on campus while being a part of the residence life experience.

## Belmont Residence Hall

Belmont Residence Hall is spread out over three wings joined together by a large common area with a largescreen TV, pool table, ping pong table, kitchen and fireplace. The lower level of the common area consists of a recreation area (including a court for volleyball and basketball), study lounge, and laundry facilities. There is a computer lab open 24 -hours, study lounge, vending machines, an ice machine, and many other amenities. The front desk is staffed by student staff to answer questions and check out equipment.

Residence hall rooms are designed for two people, and single occupancy is available on a very limited basis. Rooms range in size but are generally 12 feet by 13 feet. Each room contains two extra long twin beds, two dressers, two desks with a study lamp built into the desk, and two desk chairs.

## Crestone Residence Hall

This residence hall is home to 252 students in 72 bedroom suites. It features a laundry room, mailroom, computer lab, a state of the art classroom, cyber lounge and meeting space as well as a significant amount of open social areas. A glassed-in lounge is located on each floor. There are also card access security entrances to provide a safe living and learning environment. This building is designed for wireless internet access.

## Culebra Residence Hall

Culebra Hall has four floors of mostly suite-styled student rooms, totaling 235 beds, a commons/lounge area with adjacent small study rooms, laundry room, mailroom, warming kitchen, and a late-night food venue offering coffee drinks, soups, snacks, sandwiches, and pizza. A glassed-in lounge is located on each floor. There are also card access security entrances to provide a safe living and learning environment. This building has wireless internet access.

## Greenhorn Residence Hall

This residence hall offers four floors of mostly suite-styled student rooms totaling 263 beds with a commons/lounge area and adjacent small study rooms, laundry room, mailroom, warming kitchen, fully-equipped technology classroom seating 24 , and a computer "cyber lounge" available to residents. A glassed-in lounge is located on each floor. There are also card access security entrances to provide a safe living and learning environment. This building has wireless internet access.

Greenhorn Hall is the home of the Thunderwolf Residential Academic Communities or T.R.A.C.s. The Thunderwolf Residential Academic Communities (TRACs) are academically based communities designed to cluster students around a shared major or interdisciplinary area of study. Students on these floors will enjoy the benefits of having a close connection with their department's faculty and classmates. The TRAC floors include Business; English, History, Political Science, and Philosophy; Exercise Science, Health Promotion, and Recreation; Media \& Popular Culture; Nursing; Science, Technology, Engineering \& Math; and Teacher Education.

## Application Information

A $\$ 200$ deposit and a $\$ 50$ non-refundable application fee must accompany each application. Housing contracts are issued for the entire academic year and must include a meal plan.

## Contract Board (Meal Plan) Policies

Residence hall students are required to contract for meals at the University. Meal plans are purchased each term and allow the student full dining privileges for that term. Special diets prescribed by a physician are given consideration.

Contact information for University Housing is:
Residence Life and Housing
2290 Bonforte Boulevard
Pueblo, CO 81001
Phone: (719) 549-2602
Fax: (719) 549-2636
Email: Housing@colostate-pueblo.edu
Website: http://www.colostate-pueblo.edu/housing/

## University Village at Walking Stick (Student Apartment Housing)

University Village at Walking Stick is Colorado State University-Pueblo's on-campus apartment community for students and offers a unique housing opportunity for sophomores, juniors, and seniors or for students 21 years of age or older.

The apartments offer high-speed Internet access in each bedroom and common area, as well as premium cable TV in each bedroom and the common area. Each unit features individually controlled heating and airconditioning. Each unit is two-stories. Two floor plans are available, each consisting of 4-bedrooms and 2bathrooms. All utilities are included in the rent.

Each student at University Village has an individual housing contract with different payment options. Academic year occupancy begins August 1st and extends through May offering an expanded period of living to accommodate student's specific needs. Full calendar year occupancy is always available and students in the apartments are not required to purchase a meal plan.

The interior of each apartment offers a kitchen, dining and living room on the first floor and a study loft on the second floor. Each floor plan features four private locking bedrooms and a semi-private locking vanity and bathroom on each floor. Bedrooms range in size from 108 square feet to 124 square feet with large closets. A private phone is available at additional cost in each bedroom. This student community also features a spacious and inviting clubhouse, an on-site office with student and professional staff, an outdoor basketball court, park benches, and restricted on-site parking.

## Application Information

A $\$ 200$ deposit, $\$ 100$ restoration fee and a $\$ 50$ nonrefundable application fee must accompany each application. University Village at Walking Stick contracts are issued by semester or for the entire academic year and do not require a meal plan.

Contact information for the University Village at Walking Stick is:

University Village at Walking Stick
4000 Walking Stick Boulevard
Pueblo, CO 81001
Phone: (719) 549-2860
Fax: (719) 549-2861
Email: uvws@colosate-pueblo.edu
Website: http://www.colostate-
pueblo.edu/Housing/ResidenceHalls/University VillageWalkingStickApartments/Pages/default. aspx

## Housing for Students with Families

Although the University does not provide housing for students with families, the Pueblo community offers a variety of rental options including homes, condominiums, and apartments.

## STUDENT RECREATION

http://www.colostate-pueblo.edu/sr/
Student Recreation and its affiliated programs offer comprehensive and vibrant experiential opportunities that enhance students' fitness and wellness, knowledge, personal skills, and enjoyment by providing:

- Opportunities for a variety of activities that may contribute to individual physical fitness and wellness.
- Opportunities for organized, cooperative, and competitive activity.
- A medium through which students can learn and practice leadership, management, program planning, and interpersonal skills.
- Access to quality facilities, equipment, and programs.

The Student Recreation Center (SRC) is a student-funded facility designed to serve the recreational needs of students at CSU-Pueblo. Built in August 2008, the building is approximately 43,000 square feet located adjacent and attached to the southern portion of the HPER Building.

The Student Recreation Center facilities:

- Cardiovascular, strength, and conditioning areas
- Group fitness and dance studio
- Multi-court gymnasium with an elevated $1 / 12$ th mile running track
- Four racquetball courts (one convertible squash court)
- Swimming pool
- Rock climbing wall
- Multi-purpose room
- Locker rooms
- Lounge (Wi-Fi access) with indoor \& outdoor seating area
- Health and wellness suite
- Outdoor athletic track and artificial turf field
- Outdoor Challenge (ropes) Course
- Outdoor Pursuits Programs (equipment rental program)


## Student Recreation Center Programs

http://www.colostate-pueblo.edu/sr
Students are encouraged to regularly check the SRC website for updated information including: intramural events and deadlines, fitness schedules, pool schedules, and calendars for upcoming trips and events.

## Intramural Sports

(719) 549-2087 or email intramurals.sr@colostate-pueblo.edu

Intramural Sports provide the opportunity to compete in various organized, safe, and friendly sporting activities during the academic year. Our goal is for every participant to have fun and enjoy the campus community emphasizing recreation, health, wellness, teamwork, leadership, sportsmanship, and social interaction.

Some of the activities offered include: flag football, soccer, basketball, volleyball, softball, arena football, ultimate frisbee, indoor soccer, table tennis, and various video game tournaments.

## Group Fitness

(719) 549-2085 or email sr.fitness@colostate-pueblo.edu

A variety of fitness classes are offered for participants wanting to get a great cardio workout, to burn some fat, and/or tone their bodies. Classes are open to participants of all fitness levels. Participants are encouraged to work at their own level. Classes are taught showing routine options to accommodate different audience skill levels (low, intermediate, and advanced). WALK-ins are always welcome!! You may join a class at any time and attend as often as you wish.

Classes are led by well-trained, friendly, and enthusiastic instructors who are either certified and/or have been through a rigorous training program focusing on proper technique, safety, and class format. Each instructor is allowed to teach with his/her own unique style, which enhances and adds variety to the program.

Equipment is provided for most classes, including steps and risers, Bosu balls, free weights, Body Bars, resistance bands and tubing, mats, yoga mats and blocks, jump ropes, and more!

## Outdoor Pursuits

(719) 549-2091 or email sr.outdoorpursuits@colostatepueblo.edu

The Outdoor Pursuits Program offers a wide range of outdoor recreation and skill-building activities for students. Outdoor Pursuits core programs are:

## Outdoor Programs/Trips

Professional and student staff members guide trips such as camping, hiking, skiing, snowboarding, rock climbing, kayaking, backcountry skiing/riding, snowshoeing, avalanche safety training, backpacking, peak climbing, and mountain biking.

Outdoor Pursuits can also provide maps, trip or route advice, reading material, and other resources to plan individual adventures.

## Challenge Course/Team Development Programs

Challenge Course consists of a series of obstacles known as elements suspended from utility poles constructed with steel cables, ropes, and wood. The course offers a challenging environment (emotionally, mentally, and physically) designed to promote teamwork, cooperation, and group problem-solving skills, as well as develop individual self-confidence.

Programs are designed for a unique adventure based upon a group's objectives. Programs vary in degrees of difficulty, depending upon each group's specific needs and goals. Physical prowess is not necessary for participation; however, teamwork and cooperation are essential to help individuals discover the value of trust, shared responsibility, and mutual support. Trained facilitators provide positive support and encouragement as participants explore their individual and group abilities.

## Rock Climbing Wall

The climbing wall at CSU-Pueblo located in Massari Arena has six top rope climbing routes and three sport lead routes. Classes range from an introductory session for the first timer to advanced anchor and rescue workshops. The wall is open during the day and evenings.

## Equipment Rental

The Outdoor Pursuits Program provides CSU-Pueblo students with the opportunity to rent equipment for their own personal trips. Available by reservation for a modest term user fee, outdoor equipment includes:

- Mountain bikes
- Telemark skis, boots and backcountry gear
- Snowshoes and poles
- Tents
- Backpacks
- Camping equipment and cooking gear
- Maps, guidebooks
- Sleeping bags
- Rock climbing shoes


## DIVERSITY RESOURCE CENTER

## Mission

It is the goal of the Diversity Resource Center (DRC) to provide a series of strategies in support of student retention and cultural awareness on the CSU-Pueblo campus. This is accomplished by providing academic, student services, and programming activities.

## Diversity

The DRC collaborates with several organizations and departments to sponsor diversity programming throughout the year. These activities are held in conjunction with national holidays and cultural celebrations and are open to the entire student population and the local community. Examples include: Hispanic Heritage Month, Martin Luther King's Birthday, Black History Month, Cinco de Mayo, Disability Awareness Month, Lesbian, Gay, Bisexual, and Transgender Pride Week, Native American Day, Women's History Month, etc.

## Academic Support

Intellectual growth is important outside the classroom; therefore, activities and programs involving academic and student services departments are scheduled throughout the term to assist students to develop critical thinking; provide students with the skills necessary to maximize their talents and knowledge in order to advance towards a degree; and to develop an understanding of diversity in literature, art, mathematics, science, social science, and globally.

The Center also utilizes a variety of strategies such as cultural and diversity workshops and programs to develop an awareness of the diversity in our global society.

## Leadership

THE DRC provides opportunities for students to learn about educational opportunities and career opportunities. The DRC staff conducts, supports, and co-sponsors programs that encourage student learning and enhance student retention such as local and national internships, conferences, and workshops. Students are also encouraged to participate in University programs, clubs, organizations, and conferences on and off campus.

## Facilities, Technology, and Equipment

The DRC is located in the Administration Building, Room 311. Technology available to students includes computer stations with "wireless" capability. There are also study areas, microwaves, a television, and conference room for meeting and study group sessions. The Center is open from 8:00 a.m. until 8:00 p.m. Monday through Thursday and from 8:00 a.m. until 5:00 p.m. on Friday and is available upon request for the utilization of student organizations, departments, or committees by calling (719) 549-2627.

## ORIENTATION

New student orientation is the beginning of an ongoing process of introduction to the curricular and co-curricular opportunities available to students at CSU-Pueblo. The purpose of orientation is to facilitate the transition of new and transfer students into the CSU-Pueblo community, prepare students for the institution's educational opportunities and student responsibilities, and provide information to parents and families of new students as they support their students' educational endeavors.

During orientation students will: 1) learn about the academic requirements and expectations at the University; 2) meet other new students, experienced students, University faculty, and University staff; 3) attend a variety of sessions on co-curricular activities and getting involved on campus; and 4) become familiar with the CSU-Pueblo campus and community.

Specific orientation dates and schedules are posted on the website: www.colostate-pueblo.edu/Orientation.

## STUDENT ACTIVITIES

The Office of Student Activities (OSA) facilitates a comprehensive student engagement program intended to enrich the campus experience for University students. OSA promotes opportunities for students to participate in student leadership experiences that result in broad organizational and involvement opportunities and enhance the overall educational experiences of students through development of, exposure to, and participation in social, cultural, multicultural, intellectual, recreational, and community service programs.

OSA gives ample opportunities to enrich the campus community by supplementing and enhancing the world of academia, social networking, and personal perspective by providing collaborative ideas, thought-provoking programming, entertainment, leadership development, cross-cultural awareness, and expanding the view of student life. OSA provides plenty of opportunities for students to get involved on campus and also provides an atmosphere where students can develop culturally, cognitively, and socially through a diverse series of events and activities.

Throughout the academic year, OSA promotes events that motivate, challenge, and encourage divergent thinking through activities and events that are free for all CSUPueblo students. OSA's popular weekly event series, Wolf Pack Events, brings events such as comedians, cultural heritage dinners, movies, magicians, karaoke, sideshow performers, random acts, and the ever-popular casino night!

OSA introduces students to the vibrant campus community by working hand-in-hand with Academic Departments and other on campus and community entities: (1) Wolf Pack Welcome, (2) Weekly Major Events, (3) Student Organizations, (4) Greek Life, (5) Student Leadership Development, (6) Service Learning Opportunities, and (7) Student Experience Appreciation.

OSA facilitates a vibrant campus environment in which students and student organizations are offered opportunities to:

- Participate in co-curricular out-of-class learning activities;
- Enhance leadership abilities;
- Widen healthy interpersonal relationships;
- Get involved in various productive ways;
- Explore activities in individual and group settings for self-understanding and growth;
- Learn about varied cultures and experiences, ideas and issues, and art and musical forms;
- Design and implement programs to enhance social, diversity, and academic opportunities;
- Design and implement programs that provide intellectual, recreational, community service, and campus involvement opportunities;
- Enable group interests and encourage group activities; and
- Learn about, and use campus facilities and other resources.

OSA is located in the lower level of the Occhiato University Center, Room 006. Please visit the Student Activities website to view all events: http://www.colostatepueblo.edu/StudentActivites. Contact (719) 549-2151 for more information or to learn how you can get involved with either campus life or join the OSA team.

## Student Leadership Experience

The Leadership Program at CSU-Pueblo strives to help plan and organize a comprehensive leadership development program that is designed to enhance the total learning experience for our students. The Leadership Program evaluates student needs and implements programs and activities that facilitate the learning, growth, and development of students and fosters leadership, civic engagement, and sense of community. The Leadership Program strives to provide students with developmental and experiential opportunities that foster leadership and community involvement grounded in values and moral purpose. Through leadership education service learning and advocacy, students will become active citizens on campus, in their respective communities, and in the workplace.

## Greek Life

The Office of Student Activities is committed to enhancing Greek Life and Greek affiliated students through their fraternal experience to build a Greek community where students can have a positive collegiate experience. OSA believes that the leadership opportunities provided by membership in fraternal organizations are endless and will be an outstanding part of a student's life during their undergraduate career. Greek Life builds an inclusive Greek community and enhances the collegiate experience by supporting opportunities for siblinghood, leadership, service, and scholarship; and to serve as liaison among the collegiate chapters, parents, alumni, international organizations, and the University to provide organizational guidance, educational programs, and resources while challenging members to live their fraternal values.

CSU-Pueblo is proud to be the home of three national social Greek letter organizations: (1) Alpha Sigma Alpha Sorority - Zeta Pi Chapter, (2) Kappa Sigma Fraternity Mu Alpha Chapter, and (3) Lambda Chi Alpha Delta Omega Chapter. Contact (719) 549-2151 for more information or to learn how you can get involved with a Greek-Letter Organization.

## Non-Traditional Students Center

Non-Traditional Students Center (NoTs Spot) is an informal social and educational environment for nontraditional students, where they can become aware of the services and programs of the University and local community. The Center is a getaway space for students to study quietly before and after their classes. The Center is located in the lower level of the Psychology building.

## Distinguished Speakers Series

Colorado State University-Pueblo hosts a series of public lectures as part of the Distinguished Speakers Series each academic year. The series is an opportunity to learn from scholars, politicians, business people, and philanthropists who can inspire students and community members to think critically about current issues, trends, events, knowledge, diversity, and leadership. The series is open to the public and free for students. Events are co-sponsored by the Office of Student Activities, Student Fee Governing Board, Associated Students' Government, and other entities around campus.

For more information, contact the Office of Student Affairs at (719) 549-2586.

## Student Organizations Services

CSU-Pueblo students have opportunities to take part in the activities of a number of various student organizations. Students can search for various student organizations and join them virtually through www.colostate-pueblo.edu/StudOrgs. Students interested in starting a new recognized student organization must first find a faculty or staff member willing to advise the organization, four other CSU-Pueblo students interested in the same group, and develop a student organization constitution. All students then must meet with the Office of Student Activities to complete the process. For information, please contact the Office of Student Activities at (719) 549-2151.

For a current list of student organizations, please visit the Student Organization website: http://www.colostatepueblo.edu/Studorgs.

## Academic Organizations

- Art Club
- Associated General Contractors
- Association of Computing Machinery
- Athletic Training Club
- Automotive Booster Club Jr. B3
- Chemistry Club
- CSU-Pueblo Forensics Team
- English Club
- English Graduate Interactive Society
- Entrepreneurs and Innovation Club
- Hispanic Scholarship Fund
- Honors Club
- HSB Accounting Club
- Institute of Electrical and Electronics Engineers
- Institute of Industrial Engineering
- Math and Physics Club
- Medical Science Society
- Past Masters - History Association
- Physical Educators Club
- Political Science Club
- Society of Mexican-American Engineers \& Scientists
- Sociology Club
- Southern Colorado Association of Nursing Students
- Student Social Work Association
- Teacher Education Association
- Tempered Steel Literary Magazine
- Tri Beta Biology Club


## Campus-Life Organizations

- Anime Club
- Striving Students Supporting Students Club
- Student Ambassadors
- Thunder Punch Presents...
- Winterguard


## Cultural-Organizations

- Black Student Organization
- Bold and Beautiful Educated Sisters
- Brothers of Distinction
- CSU-Pueblo Ballet Folklorico
- Korean Students Association
- Movimiento Estudiantil Chicano de Aztlán (MEChA)
- PRIZM: Gay, Lesbian, Bisexual, Transgender, Ally Alliance


## Greek Letter Organizations

- Alpha Sigma Alpha
- Kappa Sigma-Mu Alpha Chapter
- Lambda Chi Alpha
- Lambda Theta Nu
- Order of Omega
- Sorority and Fraternity Council


## Honor Societies

- Golden Key Honor Society
- Phi Alpha Theta
- Phi Alpha Zeta Delta
- Psi Chi
- Tau Alpha Pi


## Specific Interest Organizations

- Active Minds
- Baha'i Campus Association
- Brew Club
- Campus Crusade for Christ
- Catholic Campus Ministry
- Christian Challenge
- CSU-Pueblo Young Dems
- Eco-Wolf Pack
- Fellowship of Christian Athletes
- Financial Sciences Group
- Latter-day Saint Student Association
- Pack Crossfit
- Pueblo Young Life
- Residence Hall Association
- The Underground
- Veterans and Military Support Club


## SERVICES, SUPPORT, AND STUDENT DEVELOPMENT PROGRAMS

## CAREER CENTER

The Colorado State University-Pueblo Career Center offers employment services and opportunities for students and alumni that will assist in developing a career objective, obtaining relevant work experience, and learning the skills necessary to conduct a self-directed job search.

The Career Center assists students with professional employment, internships, career planning and career coaching. This includes but not limited to: Résumé and Cover Letter development, interviewing skills, how to search and apply for internships, and strategies on how to conduct a self-directed job search.

The Career Center coordinates all on-campus recruiting with employers and coordinates the annual Internship Fair, Spring Career Fair, Teacher Education Fair, and Graduate School Fair.

All off-campus employment, full, part-time, seasonal, and internship opportunities are posted on the Career Twolves website, via the Career Center webpage on a regular basis. Resources information such as Salary Surveys, Job Choices Magazines, Graduate School, and a variety of reference materials are also available in the Center.

The Career Center is located on the main floor of the University Library and Academic Resource Center (LARC), suite 187. For further information about programs and services offered by the Career Center, contact a staff member at (719) 549-2980 or visit our website at http://www.colostate-pueblo.edu/careercenter.

## STUDENT COUNSELING CENTER

The mission of the Colorado State University-Pueblo Student Counseling Center is to provide a professional and confidential setting for the psychological, emotional, and developmental support of students as they pursue academic goals and explore personal growth, and act as a resource for faculty and staff to assist with their interactions with students.

Visits with a counselor are confidential and the records of counseling sessions are kept separate from academic records. There are some exceptions to confidentiality and they relate to those situations in which an individual describes behavior that indicates a potential for child abuse or threats to harm oneself or someone else.

The Counseling Center staff operates in a manner consistent with the concept that any client of the Center should be fully informed of their treatment options and should participate in decisions as to the nature of that treatment. We also work to honor and protect each individual's values, beliefs, and general orientation to life. We act in a manner that demonstrates respect for and supports an individual regardless of gender, sexual orientation, disability, age, or country of origin.

The Counselors work with students whose concerns include stress, depression, loneliness, difficulty adjusting to college life, difficulty with life issues, suicidal thoughts, relationship difficulty, sexual assault, and many other issues.

Counseling Center services are free service to all degreeseeking CSU-Pueblo students. The Center is located in the Psychology Building in Room 236. Appointments can be made by calling University Health and Counseling Services at 549-2830.

## ALCOHOL AND OTHER DRUG (AOD) PREVENTION PROGRAM

CSU-Pueblo is dedicated to providing a safe and healthy environment for students to complete their educational
goals without the burden of problematic or illegal use of alcohol or other drugs. The AOD Prevention Program works with individual students, small groups, and the campus/community to provide individually tailored, evidence-based prevention education and behavioral interventions.

Individual students can receive a free assessment, access to free educational/behavioral interventions, and referral to additional options on and off campus. Some students may be mandated to complete an assessment and educational intervention track as a result of violating the Alcohol and Other Drug Policy. To schedule an appointment with the AOD Prevention Coordinator, call (719) 549-2121.

Group presentations are available for student clubs, organizations, residence hall communities, fraternities, sororities, classrooms, and other workgroups.

Alcohol and Other Drug Prevention Program
OUC 003, (719) 549-2121
http://www.colostate-
pueblo.edu/CounselingCenter/Pages/Alcohol-and-OtherDrugs.aspx

DRUG FREE SCHOOLS AND COMMUNITIES ACT (DFSCA)

CSU-Pueblo maintains compliance with the Drug Free Schools and Communities Act regulations. The unlawful possession, use, or distribution of illicit drugs is prohibited. Students, faculty, or staff found in violation of campus policies will face disciplinary sanctions. For more information about the legal sanctions under federal, state, or local law; information about the health risks associated with the use of alcohol or other drugs; or for information about counseling, treatment, rehabilitation, or re-entry programs, visit:
http://www.colostate-
pueblo.edu/CounselingCenter/Pages/Alcohol-and-Other-
Drugs.aspx

## SEXUAL ASSAULT SERVICES

All members of the University community, and their guests, have the right to be free from unwanted sexual contact, coercion, abuse, violence, threats of violence, and harassment. Students are expected to conduct themselves in a manner that does not infringe upon the rights of others. When the allegation of sexual misconduct is brought forward, the University has a duty to investigate the matter and take appropriate action. Anyone found to have committed sexual misconduct will face immediate and appropriate disciplinary action, up to and including expulsion from the University.

The CSU-Pueblo Sexual Misconduct Policy affirms these principles and provides recourse for those individuals
whose rights have been violated. The complete policy may be accessed on the CSU-Pueblo website at tiny.cc/csupsmp. Students found in violation of the Student Code of Conduct will be sanctioned by the University. If a student has violated a State of Colorado law, the student may also face civil charges.

If you have been sexually assaulted, you should immediately report the incident to the CSU-Pueblo Sexual Assault Response Coordinator. She will: 1) take steps to ensure a safe environment for the student; 2) provide support, information and guidance; provide information regarding community and campus resources; 3) coordinate services available to the victim; and 4) serve as an ongoing point of contact for the student. You may also report directly to the CSU-Pueblo Sheriff's Office (719) 583-6250

## Sexual Assault Response Coordinator

Title IX Coordinator
Office of the Dean of Student Affairs
OUC 103, (719) 549-2223

## STUDENT HEALTH SERVICES

The mission of the Colorado State University-Pueblo Student Health Services is to assist students in achieving maximum physical health so that each student may participate fully in the educational and personal growth opportunities afforded by the University. Student Health Services is committed to providing quality health care and health education/promotion accessible and affordable to all students regardless of financial ability. All activities and programs offered by Student Health Services operate to assure a nonjudgmental environment and sensitivity to individuals with disabilities and those representing diverse cultural, racial, religious, gender or sexual orientation groups.

There is no charge for an appointment to see a Nurse Practitioner or Nurse. Students, however, incur charges for laboratory tests, physical or specialty exams performed, or for medication dispensed from the on-site pharmacy. Forms of payment include credit cards, check, or cash.

Students are encouraged to visit the health clinic whenever necessary. The licensed professional staff of Student Health Services consists of nurse practitioners. Patients are seen by appointment. Walk-ins are welcome and will be seen at the first available time. Student Health Services is in the back courtyard of the Occhiato University Center (to the left of the cafeteria exit).

Office: (719) 549-2830
FAX: 719-549-2646
Web: http://www.colostate-pueblo.edu/shs
Email: shs@colostate-pueblo.edu.

## STUDENT JUDICIAL AFFAIRS

Colorado State University-Pueblo students are expected to become familiar with the Code of Student Conduct and Adjudication and the student conduct process. The most recent version of the Code of Student Conduct and details of the hearing processes and procedures may be accessed via the University's website at:
http://www.colostate-
pueblo.edu/StudentLife/StudentJudicialAffairs/.
You may contact the Director of Student Judicial Affairs if you have any questions or concerns, or need to report an incident involving students at (719) 549-2092. For your convenience, portions of the 2012-2013 Code of Student Conduct are reprinted below.

## Code of Student Conduct \& Adjudication

Colorado State University-Pueblo strives to achieve a campus community in which individuals demonstrate respect for others, for themselves, and for the University; uphold high standards of personal and academic integrity; are accepting of differences and gain an appreciation for living in a pluralistic society; understand the impact of their behavior both upon the University and the larger community; and freely accept the responsibility for and the consequences of their conduct.

To that end, while recognizing that freedom of expression and challenges to the status quo are inherent to the educational environment, the University expects all members of its community to uphold certain non-negotiable values. These values include Civility, Honor, and Citizenship.

## A. Civility

Students at Colorado State University-Pueblo are expected to treat other members of the University community with appropriate consideration and respect for their shared educational goals. Violations of this standard include, but are not limited to:

1. Disorderly Conduct. Examples include, but are not limited to:
a. Conduct that is disorderly, lewd, or indecent, or otherwise breaches the peace on University premises or at University sponsored or supervised functions.
b. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, and/or other University activities, including its public service functions on or off campus, or of other
authorized non-University activities that occur on University premises. Obstruction of the free flow of pedestrian or vehicular traffic on University premises or at University Sponsored or supervised functions.
c. Participating in an on-campus or off-campus demonstration, riot or activity that disrupts the normal operations of the University and/or infringes on the rights of other members of the University community. Leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area.
2. Harassment. Examples Include, but are not limited to:
a. Harassment of any member of the University community on the basis of race, age, color, religion, national origin, gender, disability, veterans status, genetic information, or sexual orientation including gender identity and gender expression.
b. The infliction of psychological and/or emotional harm upon any member of the University community through any means, including but not limited to e-mail, social media, and other technological forms of communication.
c. Unauthorized use of electronic or other devices to make an audio or video record of any person or persons while on University premises without their knowledge, or without their effective consent when such a recording is made in a location where there is a reasonable expectation of privacy.

## 3. Hazing.

Any act which endangers the mental or physical health or safety of a student, or which destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in, any University team or organization, even if performed with the consent of the victim(s). Members of the team or organization who are aware of hazing and fail to report it to the University are also in violation of this policy.
4. Non-Compliance with University Directives. Examples include, but are not limited to:
a. Failure to comply with directions of University officials or public officials acting in the performance of their duties, and/or failure to identify oneself to these persons when requested to do so.
b. Failure to abide by authorized signs and placards posted on University premises.

## B. Honor

Students at Colorado State University-Pueblo are expected to exhibit honest and ethical behavior at all times. Violations of this standard include, but are not limited to:

1. Dishonesty. Examples include, but are not limited to:
a. Cheating, plagiarism, and/or other forms of academic dishonesty.
b. Furnishing false information to any University official, faculty member, office, or public official.
c. Initiating a complaint in bad faith against any member of the University community.
d. Forgery, alteration, or misuse of any University document, record, or instrument of identification and/or access to University facilities.
2. Misuse of Technology. Examples include, but are not limited to:
a. Unauthorized access to University technology resources, such as through the use of another person's identification and/or password.
b. Accessing, modifying, or transferring electronic files belonging to another person, or to the University, without authorization.
c. Use of University technology resources in violation of copyright laws.
d. Unauthorized use of electronic or other devices to make an audio or video record of any person while on University premises without that person's prior knowledge, or without that person's effective consent when such a record is likely to cause injury or distress.
e. Any other act in violation of University policies on the use of technology resources.
3. Property Violations. Examples include, but are not limited to:
a. Theft of University property, or of other personal or public property.
b. Any act causing, or intended or likely to cause, damage to University property, or to other personal or public property without the consent of the lawful owner.

## C. Citizenship

Students at Colorado State University-Pueblo are expected to conduct themselves as responsible citizens of our University, and to be accountable for their own safety, security, and welfare, and to that of their fellow students. Violations of this standard include, but are not limited to:

## 1. Abusive Conduct.

Physical abuse, verbal abuse, threats, intimidation, coercion, and/or other conduct which threatens the mental or physical well-being of any person.

## 2. Alcohol Misuse.

Use, possession, manufacturing, or distribution of alcoholic beverages, except as expressly permitted by University policy. Alcoholic beverages may not be used by, possessed by, or distributed to any person under twenty-one years of age. Public intoxication is not permitted on University premises or at University sponsored or supervised functions.

Please refer to the University's published Alcohol \& Other Drug Policy for more information.

## 3. Drug Misuse.

Use, possession, manufacturing, or distribution of illegal drugs or other controlled substances, except as expressly permitted by law, or possession of items designed, fashioned, or modified to facilitate the use of such substances. Use or possession of marijuana on University premises, even with a valid state medical marijuana card, is prohibited.

Please refer to the University's published Alcohol \& Other Drug Policy for more information.
4. Endangerment. Examples include, but are not limited to:
a. Possession or use on University property of firearms or simulated weapons; other weapons such as blades larger than pocket knives, ammunition or explosives; dangerous chemicals, substances, or materials; or bombs, or incendiary devices prohibited by law. Use of any such item, even if legally possessed, in a manner that harms, threatens, or causes fear to others.
b. Initiating any false report, warning, or threat of fire, explosion, or other emergency.
c. Tampering with, disabling, or removing fire extinguishers or other items intended for use in an emergency. Any other conduct which endangers the health or safety of any person.
5. Sexual Misconduct. Examples include, but are not limited to:
a. Any act that is sexual in nature and performed without the consent of all involved parties.
b. Any act that is sexual in nature and intentionally performed in view of one or more uninvolved persons without the consent of all parties. This includes, but is not limited to, the surreptitious recording and/or broadcasting of sexual acts.
c. Any act that is sexual in nature and performed in a public setting or without the consent of all persons reasonably in a position to observe such conduct. This includes, but is not limited to, the public fondling and/or exposure of one's own genitalia, buttocks, or breasts.
d. Any sexual act or conduct that would be considered a crime under state law, such as sexual assault or rape.

Consent is informed, knowing and voluntary. Consent is active, not passive. Silence, in and of itself, cannot be interpreted as consent. Consent can be given by words or actions, as long as those words or actions create mutually understandable permission regarding the conditions of sexual activity. Sexual activity with someone mentally or physically incapacitated, whether resulting from alcohol and/or other drug use, the taking of a so-called "date-rape" drug, unconsciousness, involuntary physical restraint, or mental disability, is a violation of this policy.

Please refer to the University's published Sexual Misconduct Policy for further information.
6. Violation of Community Standards. Examples include, but are not limited to:
a. Violation of any University policy, rule, or regulation not specified in this Code.
b. Violation of any Federal, State, or local law.
c. Failure to report any violations of this Code, University policies, and/or laws on the part of another student. Failure to immediately report any serious health or safety risk on campus to appropriate law enforcement and/or University officials.

## Student Organizations

As an essential part of the University community, student organizations are expected to conduct their activities at all times in a manner that reflects the values, mission, and goals of Colorado State University-Pueblo. Organizations are subject to the Code of Student Conduct in the same manner as individual Students.

## TRiO EDUCATIONAL OPPORTUNITY CENTER (EOC)

EOC is a federally funded TRiO grant program, sponsored by CSU-Pueblo that assists first-generation and lowincome individuals in gaining access to higher education. The program provides services to CSU-Pueblo students as well as high school students and adults in twelve southern Colorado counties and one northern New Mexico county. EOC services are especially beneficial to individuals who seek extra assistance in navigating the procedures related to financial aid and admissions. All services are provided free of charge.

Services include:

- Information about college and career opportunities.
- Assistance in completing admissions and financial aid applications.
- Referrals to GED and college preparation programs.
- Information about scholarship opportunities.
- College application and testing fee waivers.

For services on the CSU-Pueblo campus, students and community members can call (719) 549-2457. The central office is located on the CSU-Pueblo campus, Room 365 in the Library and Academic Resource Center (LARC). Satellite offices are located at CSU-Pueblo's Citadel Center and on community college campuses in Pueblo, Colorado Springs, Lamar, La Junta, and Trinidad. To access services or for more information, call (719) 5492457 or toll free (877) 302-4433 or visit our website: http://www.trioeoc.com.

## COLLEGE ASSISTANCE MIGRANT PROGRAMS (CAMP)

The purpose of the Federally-funded College Assistance Migrant Programs (CAMP) is to provide academic and financial support to assist students with migrant and seasonal farm work backgrounds in entering college and being successful. The CAMP program at CSU-Pueblo is in partnership with Kansas State University.

## Services:

- Academic advising
- Scholarship to assist with tuition, fees, housing, and other expenses
- Tutoring and college skills development
- Career exploration
- Mentoring, emotional and social support


## Eligibility:

- Have been employed or parents have been employed in migrant or seasonal farm work for at least 75 days in the past 24 months
- Have high school diploma or GED
- Have not entered college or have earned less than 30 credit hours
- U.S. Citizen or permanent resident
- Enrolled or admitted for enrollment at CSU-Pueblo

For more information about the CAMP program, call (719) 549-2402 or stop by the office in the Library and Academic Resource Center (LARC), Room 353.

## TRiO STUDENT SUPPORT SERVICES

Student Support Services (SSS) is a federally funded TRiO grant project providing an array of services to lowincome, first-generation students and students with disabilities. The purpose of TRiO SSS is to increase the retention and graduation rate of participants. This is accomplished by providing supportive services such as:

- Academic action planning,
- Peer tutoring (one-on-one, group, and drop-in).
- Academic, career, financial literacy, and graduate school counseling.
- Financial Aid advisement.
- College Success Course.
- Supplemental instruction in historically difficult courses.
- Academic success seminars.
- Educational resource center and study room.

To be eligible to receive services from the TRiO SSS Project, students must meet the following requirements:

- Be enrolled or accepted for enrollment at CSU-Pueblo as an undergraduate student,
- Be a low-income student, and/or
- Be a first-generation student, and/or
- Be a student with a documented /diagnosed disability,
- Meet the academic criteria as established by the TRiO SSS Project, and
- Be a citizen, national, or permanent resident of the U.S.

Students who meet these criteria are encouraged to apply. For more information, please stop by the office located in the Library and Academic Resource Center (LARC), Room 357 or call us at (719) 549-2111. Additional information can be located on the SSS website: http://www.colostate-pueblo/sss.

## TRiO UPWARD BOUND

Upward Bound is a federally funded TRiO grant program sponsored by CSU-Pueblo. The program mission is to provide low-income and first generation students the academic, social, and cultural support services necessary for successful admission to a post secondary institution of their choice. Upward Bound serves students at County, Centennial, Central, and East high schools in Pueblo.

## Services include:

- Year-round tutoring on a weekly basis at service area school sites
- Six-week Summer Precollege Academy at CSUPueblo
- Six week Summer Bridge (transition to college) Program at CSU-Pueblo
- Service learning and leadership development
- Social and cultural activities

The central office is located on the CSU-Pueblo campus, Room 376 on the 3rd floor of the Library and Academic Resource Center (LARC). To access services or for more information, call (719) 549-2750 or visit our website: http://www.colostatepueblo.edu/STUDENTLIFE/TRIO/UPWARDBOUND/

## TRiO VETERANS UPWARD BOUND

Veterans Upward Bound is a U.S. Department of Education TRiO Grant program which provides academic refresher assistance, training and advising to low income and/or first generation honorably discharged veterans who are pursuing a GED certificate and/or are preparing to enter post-secondary education. Non-credit academic instruction is available in the subject areas of English, mathematics, science, careers, computer literacy, and Spanish.

This program is an opportunity for veterans to re-establish fundamental ideas and study habits, which are prerequisites for successful performance at the postsecondary educational level. Additionally, Veterans Upward Bound provides access to academic resources, employment referrals, assistance with VA benefits applications, and referrals to various community assistance organizations.

Colorado State University-Pueblo is the host university; classes are offered at Pikes Peak Community College and Pueblo Community College. The program, all classes and materials are FREE for those who qualify.

The Veterans Upward Bound Staff are VA Certifying Officials and can assist veterans in several areas, including:

- Academic Skills Refresher Training
- GED Preparation
- College Entrance Assistance
- Admissions
- Financial Aid Applications
- VA Educational Benefits
- Academic Advising
- Career Guidance

Classes are offered in the morning and evening.
Please call to get complete information on how Veterans Upward Bound can benefit you or visit our website: http://www.colostatepueblo.edu/StudentLife/TRIO/VeteransUpwardBound/Pag es/default.aspx

VUB Contact Information:

- Colorado State University-Pueblo

2200 Bonforte Blvd,
Administration Building, Room 201B
Pueblo, Colorado 81001-4901
Phone: (719) 549-2824
(719) 549-2875

Fax: (719) 549-2914

- Pueblo Community College

Phone: (719) 549-3077

- Pikes Peak Community College

Phone: (719) 502-4545

## ACADEMIC POLICIES

Students are well advised to become familiar with the academic policies of the University. Each student owns the responsibility to comply with these policies.

## ACADEMIC YEAR

The academic year begins with Fall semester and ends with the Summer session.

## RIGHTS REGARDING STUDENTS' EDUCATIONAL RECORDS

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. Colorado State University-Pueblo's practice in regard to student record keeping and access is based on the provisions of FERPA. For specific details, visit or contact the Records Office (Administration Building, Room 202).

Schools may disclose, without consent, directory information (designated below), collectively or individually. Colorado State University-Pueblo does publish several bulletins, lists, brochures, catalogs, directories, yearbooks, commencement items, annuals, guidebooks, news releases, sports information, honor rolls, etc., containing this directory information which specifically identifies students and information about them. The following information is considered directory information:

- Student name
- Address(es)
- Electronic mail address
- Telephone number(s)
- Date and place of birth
- Classification (student level)
- Major field of study
- Participation in officially recognized activities and sports
- Weight and height of athletes
- Dates of attendance
- Potential graduation date
- Degrees granted and dates conferred
- Awards received
- Full or part-time status
- Video and photographic images of students with the exception of the official CSU-Pueblo identification photograph
- Other previous educational agencies or institutions attended

A student, by the end of the second week of classes, must notify the Records Office (Administration Building, Room 202) in writing that directory information should not be released without prior written consent by completing the —Reqest to Withhold/Release Directory Information" form.

If a student later wants this information released when requested, he/she needs to complete a new -Reqest to Withhold/Release Directory Information" form.

Generally, schools must have written permission from the eligible students in order to release any information from a student's education record. However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31) which include but are not limited by:

- School officials with legitimate educational interest;
- Other schools to which the student is transferring;
- Specified officials for audit or evaluation purposes;
- Appropriate parties in connection with financial aid to a student;
- Accrediting organizations;
- Organizations conducting certain studies for or on behalf of the school;
- To comply with a judicial order or lawfully issued subpoena;
- Appropriate officials in cases of health and safety emergencies; and
- State and local authorities within a juvenile justice system, pursuant to specific State law.

Subject to the conditions set forth in 99.31-99.35 of the Act.

## ACADEMIC DISHONESTY

Academic dishonesty is any form of cheating that results in students giving or receiving unauthorized assistance in an academic exercise or receiving credit for work which is not their own.

In cases of academic dishonesty, the instructor will inform the chair of the department prior to implementation of punitive action. Academic dishonesty is grounds for disciplinary action by both the instructor and the VicePresident of Student Services and Enrollment Management. Any student found to have engaged in academic dishonesty may receive a failing grade for the work in question, a failing grade for the course, or any other lesser penalty which the instructor finds appropriate.

To dispute an accusation of academic dishonesty, the student should first consult with the instructor. If the dispute remains unresolved, the student may then state their case to the department chair (or the dean if the department chair is the instructor of the course). A student may appeal a grade through the Academic Appeals Board.

Academic dishonesty is a behavioral issue as well as an issue of academic performance. As such, it is considered an act of misconduct and is also subject to the University disciplinary process as defined in the CSU-Pueblo Code of Student Conduct \& Adjudication. Whether or not punitive
action has been implemented by the faculty, a report of the infraction should be submitted to the Vice-President of Student Services and Enrollment Management who may initiate additional disciplinary action. The Vice-President of Student Services and Enrollment Management decision may be appealed through the process outlined in the Code of Student Conduct \& Adjudication.

## What Are Specific Acts of Academic Dishonesty?

The following acts of misconduct are acts of academic dishonesty:

1) Cheating-intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term academic exercise includes all forms of work submitted for credit or hours.
2) Fabrication-intentional and unauthorized falsification or invention of any information or citation in an academic exercise; or of documentation meant to excuse or justify adjustments related to attendance or completion of work (exams, exercises, etc.)
3) Facilitating Academic Dishonesty-intentionally or knowingly helping or attempting to help another to violate a provision of the institutional code of academic integrity.
4) Plagiarism-the deliberate adoption or reproduction of ideas, words, or statements of another person as one's own without acknowledgment.
5) Unauthorized Collaboration-intentionally sharing information or working together in an academic exercise when such actions are not approved by the course instructor.

This is not meant to be an exhaustive list of all acts of academic dishonesty, but it is a guide to help faculty and students understand what constitutes academic dishonesty.

## CLASSROOM BEHAVIOR

The classroom instructor is responsible for setting standards for all classroom conduct, behavior and discipline. Only enrolled students, administrative personnel and persons authorized by the instructor are permitted in classrooms and other instructional areas during scheduled periods. University policy and Colorado state laws also prohibit all forms of disruptive or obstructive behavior in academic areas during scheduled periods or any action which would disrupt scheduled academic activity. Use of classrooms and other areas of academic buildings during non-scheduled periods are permitted only in accordance with University practices. Anyone in unauthorized attendance or causing a disturbance during scheduled academic activity may be asked to leave. If a person refuses such a request, he or she may be removed by an officer of the Pueblo County

Sheriff's Office located at the University and is liable to legal prosecution.

All communications with instructors, whether in class, face-to-face, on paper, or by telephone, email or other electronic means, are subject to the same standards for conduct, behavior and discipline as classroom behavior. Standards of conduct outlined elsewhere (Code of Student Conduct \& Adjudication, Sexual Harassment Policy, etc.) also apply.

## CLASS ATTENDANCE

Students are expected to attend all classes for which they are enrolled unless excused by the instructor. No extensions of vacation periods are given to students regardless of the location of their homes. Non-attendance of classes caused by late registration is considered the same as absence. Students are not allowed to attend classes for which they are not properly enrolled.

The University does not have a policy permitting a specific number of cuts or absences from class. Each instructor establishes an attendance policy for his or her classes and must inform students in writing of the policy at the beginning of the term. However, the student's grades shall not be affected negatively solely due to absence from class because of participation in University-sanctioned events. Such University-sanctioned activities may include, but are not limited to: intercollegiate competition, participation on the forensics team, and field trips. Class absence due to University-sanctioned participation does not in any way excuse students from completing class preparations, assignments, examinations, or projects.

Although students may drop classes on their own initiative within time lines established by policy, faculty members have the right to withdraw students for non-attendance.

## CATALOG REQUIREMENTS

Students may graduate under the catalog requirements for the year in which they are first enrolled, provided they complete graduation requirements within a continuous period of no more than 10-years. If a student withdraws or is withdrawn for any reason from the University and is subsequently readmitted after an absence of two or more semesters, re-admittance will be governed by the catalog current at the time of readmission. Any exceptions to the policy must have prior approval from the Provost. Students should obtain and keep a copy of the catalog under which they enter or are readmitted. Students may also elect to follow any subsequent catalog.

## TIME LIMITATION ON CREDIT

Any college credit earned more than 10 years before the date of admission or readmission is not applicable toward
the degree desired unless it is approved by the appropriate department chair. This policy includes transfer credit previously accepted by CSU-Pueblo. This policy does not apply to general education courses. Credits from general education courses are accepted even if earned more than 10 years prior to the date of admission or readmission.

## CLASSIFICATION OF STUDENTS

Classification of students is based on semester credit hours earned as follows:

| Freshman | $0-29$ | semester hours earned |
| :--- | ---: | :--- |
| Sophomore | $30-59$ | semester hours earned |
| Junior | $60-89$ | semester hours earned |
| Senior | $90+$ | semester hours earned |

Graduate Student See the Graduate Studies section for classification information.

## Guest Student - No Credit

Applicants who wish to register as a guest (no credit) without degree-seeking status should contact the Office of Admissions for current policies and procedures.

A guest (no credit) student may carry up to 6 hours per term. A guest (no credit) student is ineligible for financial aid. In place of a grade for each course, students receive the symbol NC (no credit) on their transcripts.

## Guest Student - For Credit

Guest (for credit) student category is reserved for applicants who wish to enroll in courses without degreeseeking status. Applicants who wish to register as a guest (for credit) student must be Colorado residents and are required to complete a short application with the Office of Admissions each term that they wish to enroll. Guest (for credit) students are NOT REQUIRED to submit official transcripts, test scores or an application fee; however test scores or a transcript will be required to enroll in an English or Math course. Tuition and fees are based on the number of credits for which they register and are INELIGIBLE to receive financial aid. A guest (for credit) student may carry up to 15 hours per semester and may earn a maximum of 30 semester hours while maintaining guest status. A guest (for credit) student must maintain a 2.000 cumulative grade-point average. Guest (for credit) students who wish to exceed the 30 -semester hour maximum must formally apply for admission. For information on Guest (for credit) Student Status for graduate students, see Graduate Programs section in catalog.

## Auditor

An auditor is defined as a student who has been permitted to enroll in a course for which he or she will receive no credit. Auditors determine their own attendance, take no examinations, receive no grades, do not participate in classroom discussion except as permitted by the instructor and earn no credit. They pay the same tuition and fees as persons enrolled for credit. An auditor may not be reclassified to receive credit in the course after the drop period of the course has passed. In place of a grade, students receive the symbol NC (no credit) on their transcripts. Students wishing to register as auditors must declare their intention at registration and may not seek credit in the course after the drop period for the course has expired. Likewise, a student may not change his or her regular enrollment to auditor (no credit) status after the end of the drop period. Auditor (or no credit) forms are available in the Records Office.

## Senior Citizen

Persons 65 years of age or older, or 62 and retired, may audit courses without paying tuition on a space-available basis. Permission of the instructor is required in all cases. A grade of NC (no credit) will be posted.

## FULL-TIME / HALF-TIME ENROLLMENT STATUS

Enrollment status (full-time, half-time) is determined by the number of credit hours which the student has completed or is pursuing for the term in which the certification is requested.

Credit hour requirements for enrollment verification (i.e., health insurance, auto insurance, loan deferments) are as follows:

Fall/Spring Semesters
Undergraduates
Full-time $\quad 12$ or more credits
Half-time 6-11 credits
Less than half-time
Graduate Program
Full-time $\quad 9$ or more credits
Half-time 6-8 credits
Less than half-time Below 6 credits

| Summer Session <br> Undergraduates <br> Full-time |  |
| :--- | :--- |
| Half-time | 6 or more credits |
| $\quad$ Less than half-time | $3-5$ credits |
| Graduate Program | Below 3 credits |
| Full-time | 6 or more credits |
| Half-time | $3-5$ credits |
| Less than half-time | Below 3 credits |

You may print an Enrollment Verification Certificate online through PAWS or visit the Records Office for certification of enrollment status and term(s) of attendance. (Please note that the above schedule for enrollment status may differ from the full-time/half-time schedule as recognized by Financial Aid.)

Verification of enrollment or loan deferments can only be processed for the term in which the student enrolled and paid tuition for the course(s). If a student receives an IN grade for a course(s) and continues working to complete the requirements for the course(s), he/she would not qualify for a verification of enrollment or loan deferment for that completion time beyond the initially enrolled term for that course(s).

## GRADES AND THE GRADING SYSTEM

## Awarding of Grades

Grades are earned by students and awarded by faculty.

## The Grading System

The quality of a student's work is appraised according to letter grades and grade point averages. The grading system of Colorado State University-Pueblo includes the following grades: A, A-, B+, B, B-, C+, C, D+, D, D-, F, S, $\mathrm{U}, \mathrm{IN}, \mathrm{W}, \mathrm{WN}, \mathrm{NC}, \mathrm{IP}$. Faculty use of +/- grading is optional. Course instructors should indicate on the course syllabus and/or policy statement the grading system used in the course.

| Grade |  | Grade Points <br> per Credit |
| :---: | :--- | :---: |
| A | (Excellent) | 4.00 |
| A- |  | 3.67 |
| B+ |  | 3.33 |
| B | (Good) | 3.00 |
| B- |  | 2.67 |
| C+ |  | 2.33 |
| C | (Satisfactory) | 2.00 |
| D+ | (Poor) | 1.33 |
| D |  | 1.00 |
| D- | (Failure) | 0.67 |
| F | (Satisfactory) | 0.00 |
| S | (Unsatisfactory) | $*$ |
| U | (Incomplete) | $* *$ |
| IN | (Withdrawal) | $* *$ |
| W | (Administrative Withdrawal |  |
| WN | or Nonpayment) | $* *$ |
|  | NC | (No Credit-Audit) |
| IP | (In Progress) | $* *$ |
|  |  | $* *$ |

* Credits not used to compute the grade-point average but counted toward graduation, excluding remedial courses.
** Credits not used to compute grade-point average and not counted toward graduation.

D Indicates below average achievement. Although grades of $D+, D$, and $D$ - are passing, they do not constitute satisfactory grades. Many departments do not permit these grades to count toward fulfillment of their requirements, even though the hours may be counted toward graduation requirements. Such grades from other institutions are not accepted in transfer.

F Counted as a course attempted; does not constitute a passing grade nor does it satisfy major or institutional requirements.

S Available only in certain approved courses.
U Available only in certain approved courses.
W This grade is given under two conditions: 1) when a student withdraws or is withdrawn from a course prior to the end of the regular withdrawal period; 2) when a student withdraws totally from the University after the initial drop period.

IN The grade of IN is recorded at the end of the term when a student is granted an extension of time to complete course work which could not be completed for reasons beyond the student's control. It is given solely at the discretion of the instructor and is not to be used to grant the student additional time to complete assigned course work due to poor time management. The student must be receiving a passing grade at the time an IN agreement is made, which may be no earlier than the end of the withdrawal period. The IN agreement consists of a plan for the completion of the course work and must designate the student's existing grade in the course and the work to be completed for the IN to be removed. It must be in writing, signed by the instructor and the student, and placed on file in the Department office. An incomplete course must be satisfactorily completed within the time frame stipulated by the instructor but no later than one calendar year from the date the IN was given. An incomplete not removed within one calendar year shall revert to the pre-assigned grade and be included in the computation of the student's grade point average. Re-enrollment is not allowed while the IN is still outstanding. Adjunct faculty are not allowed to award grades of $I N$ without approval from the Department Chair.

IP A grade of IP may be given at the close of the term in certain approved courses. Students receiving an IP must register in the same course the next term, pay tuition and must complete the work during that term. Courses for which IP grades are accrued are
identified in the Course Description section of this catalog.

## Grade-Point Average Computation

Earned grade points are computed by multiplying the point value of $A, A-, B+, B, B-, C+, C, D+, D, D-$, and $F$ grades earned by the number of credit hours of the course(s) in which the student was enrolled. A student's term GPA is calculated by dividing total grade points by total credit hours attempted. A student's cumulative GPA is calculated by dividing total grade points earned by total credit hours attempted. Earned grades of S, U, W, WN, IP, IN and NC are not computed in the grade-point average. For purposes of computing a student's grade-point average only CSU-Pueblo hours are used. Grade Changes

Two signatures are required to successfully complete a faculty initiated student grade change. Since the faculty member is solely responsible for affecting a grade change, the Faculty signature is required. The second signature will be that of the Department Chair. In the event that the Department Chair is the instructor of the course, the second signature will be that of the Dean.

## Grade Change Policy/Academic Appeals

Students have the right to appeal any academic decision, including the assignment of final grades. A grade-change request should be extremely rare. It is not appropriate to change a grade because the student submitted additional work.

Before making an appeal, the student must discuss the situation with the instructor(s) involved in the decision. If a grade change is approved by the instructor(s) on the basis of this discussion, the instructor(s) will complete and submit a grade change form.

If a grade change is not approved by the instructor(s), the student may appeal the instructor(s') grading decision based upon one or more of the following four grounds. The burden of proof rests with the student to demonstrate that the grading decision was made on the basis of any of these following conditions:

1) An instructor(s) made an error in calculating the original grade or a similar occurrence.
2) A grading decision was made on some basis other than performance and other than as a penalty for academic dishonesty.
3) A grading decision was based on standards unreasonably different from those that were applied to other students.
4) A grading decision was based on a substantial, unreasonable, or unannounced departure from previously articulated standards.

The student must submit a written grade appeal to the department chairperson. The written document must set forth the basis for the appeal, identifying at least one of the four categories set forth above. The request must be submitted, or postmarked if mailed, no later than 20 working days after the first day of classes of the next regular semester following the date the grade was recorded. If no appeal is received before the deadline, the grade will be considered final. It is strongly recommended that the student meet with the department chairperson within 10 working days after submission of the appeal to discuss the appeal process. The department chairperson, the dean, or any administrative official is prohibited from making a decision concerning the grade change appeal.

Within 20 working days of receipt of the written request for an appeal, the chairperson must provide a copy of the student's appeal to the instructor(s) who assigned the grade, the dean, and the Academic Appeals Board unless the appeal has been withdrawn. The instructor(s) must write a response to the Academic Appeals Board within 10 working days of receipt of the appeal. If the written request for an appeal is received prior to or during the summer session, when the instructor(s) who assigned the grade may not be available, the chairperson must provide copies to the faculty member and the Appeals Board no later than 20 working days from the beginning of the following fall semester.

The Academic Appeals Board will review the written appeal and response of the instructor(s). The Board may elect to separately interview both the student and the instructor(s) before rendering a decision. The decision of the Academic Appeals Board will be based upon whether one or more of the conditions for an appeal set forth above have been met. At the conclusion of the deliberations, the Board will render one of the following decisions:

1) The original grading decision is upheld.
2) The Academic Appeals Board will re-evaluate the student's achievement of the instructional objectives of the course and assign a grade accordingly.

The Academic Appeals Board decision is the final decision of the University. Within 20 working days of reaching the decision, the Academic Appeals Board will provide written summaries of the hearing and decision, together with a rationale for that decision, to the student, the instructor(s) who assigned the grade, and the academic department of the instructor(s). Should the appeal result in a grade change, the Chair of the Academic Appeals Board will submit a grade change form to the Records Office.

## DEANS' LIST

All undergraduate students, including those enrolled in continuing education classes and those enrolled in a second baccalaureate degree program, are eligible for the

Deans' List in a given semester provided they:

- Achieve a minimum semester grade-point average of 3.500;
- Are degree-seeking;
- Earn at least 12 credit hours at Colorado State University-Pueblo; and
- Receive no grade of - nicomplete" (IN).

The Deans' List is generated and published fall and spring semesters by the Provost's Office, excluding summer.

## GOOD ACADEMIC STANDING

The academic standing of all students is reviewed two times each year by Student Academic Services, at the end of fall, and spring semester. Students must have a cumulative grade point average of $\mathbf{2 . 0 0 0}$ or higher to remain in Good Academic Standing.

## ACADEMIC PROBATION

Students are placed on academic probation at the end of any semester (excluding summer, and excluding first semester freshman year) in which their cumulative gradepoint average falls below 2.000 .

Academic Probation status is noted on the transcript. In addition, students receive a letter (Notification of Academic Probation Status) from the Student Academic Services Office. At this point, students are strongly encouraged to develop an Academic Improvement Plan (AIP) in collaboration with staff from the CSU-Pueblo Student Academic Services Office.

Students on Academic Probation will have two semesters (excluding summer) to raise their cumulative grade-point average to a 2.000 .

## ACADEMIC SUSPENSION

Students who fail to clear Academic Probation after two regular semesters (excluding summer) will be placed on Academic Suspension.

Students placed on Academic Suspension cannot re-enroll at the University for a period of two consecutive semesters (excluding summer) unless they successfully appeal their suspension by the appeal deadline (see Appeal Process for Academic Suspension below).

Students placed on Academic Suspension who successfully appeal their suspension can return to the University on a Conditional Reinstatement.

Students on Conditional Reinstatement status will remain under the guidelines of the catalog in effect at the time of their regular admission.

Students on Academic Suspension who stay away from the University two consecutive semesters (excluding summer) following their notice of formal academic suspension must (a) be readmitted to the University, and (b) adhere to the requirements of the catalog in effect at the time they are readmitted to the University. Please see the Catalog Requirement section for more information.

## Appeal Process for Academic Suspension

Students who want to appeal their Academic Suspension are responsible for initiating the process by submitting an Appeal Letter to Student Academic Services. The Appeal Letter must address two issues: (1) why the Academic Suspension is being appealed, and (2) what the student will do to make an improvement in academic performance.

The deadlines for Appeal Letters requesting Conditional Reinstatement are:

- Subsequent fall semester-the 2nd Monday in June
- Subsequent spring semester-the 3rd working day of January

Failure to submit Appeal Letters within this prescribed time line will result in Academic Suspension for two consecutive semesters (excluding summer).

## CLASS HOURS AND CREDIT HOURS

A class hour consists of 50 minutes. One class hour per week of lecture or discussion for a semester earns a maximum of one credit hour. Two or three class hours a week of laboratory activities for a semester earn a maximum of one credit hour. The number of credits awarded for a given course is determined by the number of lecture or laboratory hours spent each week in class and are authorized in accordance with guidelines of the Colorado Department of Higher Education.

## COURSE LOADS AND OVERLOADS

Enrollment in more than 18 credit hours in a given term is defined as an overload. Both resident and extended studies (continuing education) courses are counted in the credit-hour total.

Students who have earned 15 or more semester credit hours and have a grade-point average of 3.000 or greater are eligible to enroll for an overload.

Overloads must be authorized by student's faculty advisor and department chair (or dean if the advisor is the department chair). Both signatures are required. Appeals may be made to the dean of the college of the student's major. Under no circumstances may a student enroll for more than a total of $\mathbf{2 5}$ semester credit hours in a single term.

## CREDIT BY EXAMINATION

A student may earn a maximum of 30 hours of credit by examination towards the minimum semester hours required for graduation regardless of the source type, (i.e., CLEP/DANTES, International Baccalaureate, advanced placement, and/or in-house departmental exams). Credit by Exam is not counted as hours in residence. Types and methods of earning credit by examination are as follows:

## 1) Advanced Placement

Colorado State University-Pueblo participates in the Advanced Placement Program of the College Entrance Examination Board. Under the program, outstanding secondary school students may take certain college-level courses in their own high schools. Students who have taken the Advanced Placement Examination and who have received scores of 3,4 , or 5 will generally be granted University credit as well as advanced placement; scores of 3 are not accepted in some subjects.

CSU-Pueblo credit is awarded and posted on the transcript without a grade, is counted toward graduation, and may be used to fulfill specific requirements. For more information, please contact the Visitor and Transfer Center.
Please refer to the Advanced Placement (AP) Equivalency Chart that shows the specific courses and credit to be awarded based on score(s) on the AP examination(s) located at the end of the Academic Policies section.

## 2) College Level Examination Program

Credit earned by the student on these exams will be accepted by CSU-Pueblo and posted on the transcript provided the student submits an official CLEP/DANTES score report and has scored at or above established benchmarks. If a student has already earned college credit in an academic course(s) before taking CLEP/DANTES exam, the latter credit will be considered duplicate and will not be awarded. Please contact the Visitor and Transfer Center for additional information.

Please refer to the CLEP and DANTES Equivalency Charts that shows the specific courses and credit to be awarded based on score(s) on the CLEP and DANTES examination(s) located at the end of the Academic Policies section.

## 3) International Baccalaureate Diploma Program

Colorado State University-Pueblo recognizes and encourages high school students to participate in the International Baccalaureate Diploma Program. The University recognizes the IB program as a rigorous
pre-university course of study for highly motivated secondary students. Students who successfully complete the IB program and examination(s) are eligible to receive credit and advanced placement standing at CSU-Pueblo.

To receive University credit, a student must take the IB exam(s) and request that the scores be sent to CSU-Pueblo Office of Admissions. Upon receipt of the scores, an evaluation for credit will be performed and the student will be notified by mail of the evaluation results in approximately two to four weeks.

A score of 4 or better on the IB exam(s) will receive between 3-10 credits for most examinations. The credit will be posted on the student's permanent record/transcript. Please contact the Visitor and Transfer Center for additional information.

Please refer to the IB Equivalency Chart that shows the specific courses and credit to be awarded based on score(s) on the IB examination(s) located at the end of the Academic Policies section.
4) Credit by Examination (In-house subject area exams)

Departmental faculty shall identify those undergraduate courses, if any, for which students may earn credit by examination.

If a student is successful in challenging a course, the title of the course, credit hours and notation of credit by examination will be recorded on the student's permanent record/transcript. (Unsuccessful attempts are not recorded on the transcript.) The credit hours earned by examination do NOT count in the student's load for the term or in the calculation of the student's grade point average.

The non-refundable fee for credit earned by examination is $\$ 50$ per course. Application forms for credit by examination are available from the Records Office.

A student may earn credit by examination in any of the approved courses subject to the following conditions:

- The student has not previously earned credit in the course at CSU-Pueblo, has not previously failed a challenge exam for the course, or has not previously failed the course itself;
- The student has approval of the appropriate department chair (with appeal rights to the dean) to take the challenge examination;
- The student's performance on the examination is at the level of $B$ or better;
- The student is currently enrolled at CSU-Pueblo and in good academic standing at the time the examination is administered;
- The student does not use the challenged course to satisfy the residency requirement for graduation; and
- The student satisfies any and all additional criteria as specified by the department.


## 5) General Education Test-Out Policy (In-House)

All courses satisfying general education requirements have a test-out procedure. The student does not receive a grade or credit for the course, nor does the test-out appear on the transcript.

Students wishing to test out of a course should contact the chair of the department offering the course. A student who successfully completes the test-out examination with a grade of $B$ or better satisfies that particular general education requirement.

General education test-out examinations are free of charge.

## FINAL EXAMINATIONS

Final examinations are not to be scheduled at times other than those published in the Semester Notes and on-line. In some courses a final examination may not be appropriate to the material; however, classes meet through the period scheduled for the final examination.

## FACULTY RECORDS

All faculty members keep appropriate records (such as grade books or sheets) of each student's progress in every course offered for University credit. Records are retained by the faculty member's department for one year. They are treated in confidence by the faculty member, chair of the department, and staff.

## REPEATING COURSES FOR ACADEMIC CREDIT

With certain restrictions, undergraduate students may repeat a course to raise the grade. Students do not accumulate graduation credits by repeating a course: a course's credits apply toward graduation only once, no matter how many times the course is repeated. (-Reqatable" courses are an exception to this rule; see below.) The first two times a course is repeated, only the highest grade is averaged into students' cumulative gradepoint average. (For example, if a student earns an $F$, a $C$ and a $D$ in successive attempts with a course, only the $C$ will be included in the student's cumulative GPA.) For the fourth and any subsequent time students complete the same course, the highest of the first three grades AND all subsequent grades are averaged into the GPA. (For
example, if a student earns grades $F, C, D$ and an $A$ in successive attempts with a course, the $C$ and the $A$ are averaged into the student's cumulative grade-point average.

Transcripts contain an appropriate entry of RP indicating that the course has been repeated and the grade-point average has been recomputed.

If a student transfers a course to CSU-Pueblo from another institution and then repeats the course at CSUPueblo, the credit and grade points from CSU-Pueblo will remain part of the cumulative hours and grade point average. In addition, if a student takes a course at CSUPueblo and then transfers the course from another institution, the credit and grade points from CSU-Pueblo will remain part of the cumulative hours and grade point average. Duplicate credit will not be granted.

CSU-Pueblo course grades cannot be recomputed using transfer courses. Students should be aware that some academic departments place limitations on repetition of courses for majors and/or minors.

## individual courses which may be repeatable FOR CREDIT

Generally courses cannot receive duplicate credit. Some specified courses may be repeated for credit. These courses are designated by the word Repeatable in the Course Description section of this catalog. The number after the word Repeatable indicates the maximum number of credits that may be used toward degree requirements.

## CLASS SCHEDULE CHANGES

Students are encouraged to secure advisor approval for all schedule changes. When students do not secure such approval, they assume full responsibility for their progress toward meeting degree requirements.

Students are responsible for processing schedule changes during the drop or add period for each course. Under no circumstances shall the instructor or advisor assume this responsibility on behalf of the student.

Continuing students are strongly encouraged to take advantage of the pre-registration process in order to obtain the class schedule which best meets their needs.

If you pre-register and subsequently choose not to attend, you are responsible for dropping all courses before the drop period.

## Adding Courses/Late Add Policy

A student may add a course without instructor approval during the first week of the regularly scheduled semester.

However, after the first week of the scheduled semester, a student can only add a course with the instructor's approval and payment of a late fee. After the 5th week a course may only be added with the approval of the instructor, the chair, and payment of a late fee.

## Addition of Independent Study and Continuing Education

A resident student may enroll in independent study and continuing education courses only if the addition of such courses will not cause his or her program to exceed the maximum load allowable.

## Dropping Courses

Students may drop courses before $15 \%$ of the course duration has passed without a record of the dropped course appearing on the student's permanent record. Courses may be dropped officially in the Records Office or processed through the Web Registration System (PAWS). The drop date of each course is printed on the student's schedule.

## ADMINISTRATIVE DROP FOR NON-ATTENDANCE

CSU-Pueblo reserves the right to administratively drop all students from the University who fail to attend an enrolled course session at least once during the first two weeks of the semester. The University will attempt to contact the student before an administrative drop is enacted. This is done to ensure that CSU-Pueblo contributes to student success and accurately reports student enrollment.

## WITHDRAWAL FROM A COURSE

Immediately following the end of the drop period, students may withdraw from a course according to the policies below.

When a student withdraws from a course before 60 percent of the course duration has passed, a grade of W" (withdrawal) will be recorded on the academic record. After 60 percent of the course duration has passed, a student may not withdraw. Tuition and fees will not be adjusted for course withdrawals during this withdrawal period. Course withdrawals can be processed in the Records Office or through the Web Registration System (PAWS). The withdrawal date of each course is printed on the student's schedule.

## FACULTY INITIATED STUDENT WITHDRAWAL

Under certain specific circumstances, a faculty member or the University may withdraw a student from a course or courses. The circumstances are either $A$ or $B$ below.
(A) Faculty may withdraw a student from a course for non-attendance if the student has never attended
class through the end of the drop period. The course will be removed from the student's transcript and no grade will be issued. Withdrawal forms must be received by the Records Office by 5:00 pm on the last day of the drop period.
(B) Faculty may withdraw a student for a designated number of absences or for any other reason as stated in the course syllabus with the student's signature acknowledging the withdrawal on the course withdrawal form. In the event that faculty efforts to contact a student concerning the withdrawal are unsuccessful, the signature of the department chair (or Dean if the Department Chair is the instructor of the course) acknowledging the withdrawal may be substituted for the student signature. The student will receive a grade of W for the course. Exceptions to the requirement of a student or department chair signature may be granted to programs by the Provost.

If a faculty member chooses to incorporate this policy, it must be stated in the course syllabus. The criteria to be met by the student which would trigger a Faculty Initiated Withdrawal of the student from the course must be stated in the policy. The criteria will also include the method by which the student will be informed by the faculty member of the impending withdrawal. As with the Student Initiated Withdrawal Policy, faculty may not initiate a student withdrawal after the official course withdrawal period has ended.

## TOTAL WITHDRAWAL FROM THE UNIVERSITY

Up until the drop period expires, students may drop fullterm courses without charge by using our web registration system (PAWS) or at the Records Office. Short-term courses will have shorter drop periods. Students must refer to their course schedules for exact date for each course.

After the end of the drop period, students who are planning to withdraw from all courses and leave the University for any reason must begin the withdrawal process with Student Academic Services (LARC 267) prior to departure. Total withdrawals will not be processed after the last scheduled class day of the semester. Students residing in the residence hall also must check out at the housing office. Unless the total withdrawal procedure is followed, students are not eligible for an adjustment (if appropriate) of tuition and fees and will receive failing grades in all courses.

## Retroactive Withdrawal

A student may request that all grades in previous terms be retroactively removed and replaced by entries of $W$ " on his/her transcript if he/she had experienced, during that term, health and/or personal problems so severe that
he/she could not reasonably have been expected to complete the term satisfactorily. Application for a retroactive withdrawal may occur any time after the current term and before conferral of a degree. The Retroactive Withdrawal request form must be submitted with supporting documentation to the Records Office. Documentation must include specific information from a professional who can attest to the students' claim of illness or legal issues, speak clearly to the difficulty that was encountered by the student and correlate to the specific time frame requested. After a request is received by the Records Office, it will be addressed by the Retroactive Withdrawal Committee. Once the request is reviewed and a decision is made, the student will be notified of the outcome by mail. If a student chooses not to share such information, the Student Academic Appeals Board will decide the case based on the information available.

Examples of reasonable requests for retroactive withdrawal include:

1) Death of immediate family member
2) Serious personal/family problems
3) Unexpected deployment or relocation
4) Diagnosed physical or mental condition/illness

A retroactive withdrawal is not allowed if a student has already earned a degree from Colorado State UniversityPueblo and the term being requested is prior to the degree conferral.

Retroactive withdrawal applies to every class for the requested term(s), not for selective courses during a term.

An approved retroactive withdrawal will have no impact on any financial balance owed to the University. Please contact Student Billing Services for Tuition Appeal Information.

## Military Withdrawal

If military obligations interrupt the academic work of a member of the armed forces registered for courses, the student may ask instructors for an early termination of his or her courses. Early terminations may include, but are not limited to: 1) a grade of W ; 2) an incomplete (IN) grade, if there is any chance the student will be able to complete the course requirements; 3) an early final examination and course grade; 4) partial course credit; or 5) an opportunity to complete the class by independent study. It is the student's responsibility to make such a request in writing to the instructor. After the student and instructor have agreed on the terms of early termination, the agreement must be approved in writing by the department chair and the dean.

If a student member of the armed forces receives orders to deploy or temporally transfer stations for an extended
period, that student may be accorded a military leave of absence. In those cases, the student will retain their catalog rights and return to the University at the end of their deployment or temporary transfer without break or need to reapply for admission.

## EXPERIENTIAL CREDIT COURSES

Through cooperative education, internships, field experiences and laboratory research, students in many degree programs have the opportunity to expand knowledge and apply theory in real-life situations. All experiential credit courses occur under the direction of an academic instructor and are included in the regular University curriculum. In some cases, such courses are required for majors. All such courses require registration, payment of tuition, carry credit, are listed in the catalog and include a planned program of activities outlined in the course syllabus. The grading system is the same as the system used for regular courses.

## CREDIT FOR LIFE EXPERIENCE

Some students may seek academic credit for previous out-of-school work experiences in which the job responsibilities were similar to experiences offered in University-sponsored internships and other programs. Credit for such experiences may be given if the following conditions are met:

1) The experience must be directly similar to the content of internships, field courses and/or laboratory courses in the regular curriculum;
2) The student must describe in writing the nature of the experience and what he or she learned through it;
3) The experience and learning also must be documented by the student's on-the-job supervisor. Documentation must include a detailed account of the nature, frequency and duration of the duties; and
4) A paper integrating the experiences with subsequent or concurrent classroom instruction must be submitted and approved.

The maximum number of credit hours allowed for life experiences is six. Any amount over six must be approved and justified by the appropriate dean to the Provost. Credit for life experiences is granted only for experience gained within 12-years from the date the degree is expected to be awarded. Credit for life experiences is subject to the approval of the department chair and the dean of the college in which credit is requested.

## TRANSCRIPTS OF CREDIT

Official transcripts are issued by the Records Office at the signed request of the student. There is a non-refundable fee for each official transcript. Check with the Records Office for current fees. Transcript fees must be prepaid
before official transcripts will be released. Acceptable methods of payment are cash, personal check, money order, VISA, MasterCard and Discover. Special fees are charged for special handling (Priority, Express, International mail, and faxing).

All accounts with Colorado State University-Pueblo must be settled before an official transcript can be issued.

Transcripts are processed as rapidly as possible and are usually issued within five working days from the date the signed request is received in the Records Office. Students should allow extra time for issuance near the end of term. Due to the processing of grades, transcripts (official or unofficial) for enrolled students will not be released during the week of finals and the following week. CSU-Pueblo does not accept e-mail or telephone transcript requests.

## Faxing of Transcripts

A pre-paid $\$ 10$ fee is required for an unofficial transcript to be faxed to a destination within the United States; the charge is $\$ 15$ for a transcript faxed outside the country. Since faxed transcripts are considered as working (unofficial) documents only, the fax will be followed up by an official (hard copy) version to follow by first class mail within five working days. In the event that the student is not eligible to receive an official transcript, i.e., outstanding accounts receivable balance, etc., only the (unofficial) faxed copy can be provided for the above fee.

## How to Order a Transcript

Signed transcript requests should include the following information:

- Student's full name (including maiden or other name if applicable);
- Student's current address and phone number;
- Student ID number;
- Date of birth;
- The last term the student was enrolled at CSUPueblo;
- Instructions on whether the current term grades or degree conferral; are to be included (this is important when a transcript is ordered near the end of a term);
- The complete name and address of the agency, school or individuals to whom transcripts are to be sent;
- The student's signature (this provides CSU-Pueblo with the necessary authorization to release the transcript to the designee; and
- Payment method.


## NOTES:

- Transcripts do not include Upward Bound, GED, ACT, SAT, GRE or college class rank information.
- If someone other than the individual named on the transcript has been authorized to pick up the document in person, they must provide a signed release from the person named on the transcript.


## Payment of Transcripts

- If payment is to be made by credit card, please provide type (VISA, MasterCard or Discover), credit card number, expiration date, 3-digit CVV code on back of card, name of card holder, address of card holder and daytime phone number.
- If the order is for a faxed transcript, the following information is also needed:

1) The fax number and name of the person to whose attention the transcript is to be sent.
2) The name and address to which the subsequent official, hard copy transcript will be mailed.

## GRADUATION PLANNING SHEETS

Graduation Planning Sheets for the summer session and fall semester are due no later than the third week of the spring semester prior to the graduating term.

Graduation Planning Sheets for the spring semester are due no later than the third week of the fall semester prior to the graduating term.

Students unable to complete degree requirements will be required to submit an amended Graduation Planning Sheet or a graduation update to the Records Office in order to establish a new tentative degree conferral date.

## COMMENCEMENT

Commencement exercises take place once a year, at the end of spring semester. Students eligible to participate include those who completed graduation requirements in the preceding fall semester, as well as those who are scheduled to complete requirements in the spring semester or those who are scheduled to complete requirements in the summer session following commencement. Candidates must appear in official academic regalia at commencement exercises.

Utilizing data from official deadlines, the information for the commencement program is finalized in early Marchchanges, modifications, or updates received after that time may not be included.

The commencement program is not an official list of confirmed graduates or honors awarded. A final audit will determine degree conferral and academic accords

## GRADUATION WITH UNIVERSITY HONORS

There are three levels of University (baccalaureate degree only) scholastic honors at graduation: summa cum laude, magna cum laude and cum laude. A minimum of 60 semester credits must be earned at CSU-Pueblo for a student to be considered for these honors. Remedial courses, credit within Academic Renewal, and credit by examination cannot be included in the 60 semester credits.

To graduate summa cum laude, a minimum cumulative grade point average of 3.900 is required; for magna cum laude, a minimum cumulative grade point average of 3.750 is required; and, for cum laude, a minimum cumulative grade point average of 3.500 is required.

While honors will be listed in the commencement program for those who may reasonably anticipate them, the listing in the program is not a guarantee of receiving honors. The listing and reading of cum laude status for degree candidates are based on the grade point averages achieved at the beginning of the student's final term. The official honor awarded, based on the final grade point average and hours earned in residence, will be noted on the student's diploma and transcript.

## GRADUATION WITH DEPARTMENTAL HONORS

The specific requirements for graduation with Departmental Honors differ for each major or area of emphasis of study. Students should see an advisor within their major in order to develop a specific plan of study for Departmental Honors credit.

## CLASS RANK

CSU-Pueblo does not maintain or provide class rank information.

## DIPLOMAS

Diplomas are dated and awarded to graduating students each semester or session (fall, spring and summer) upon graduation clearance of each student. The spring commencement date and the last day of the summer and fall term are the dates recorded on diplomas and on the transcripts for all students fulfilling degree requirements within a degree granting period. The diploma is imprinted with the name of the degree awarded and the student's major(s). Minors or emphases are not printed on the diploma. Diplomas will be mailed to graduates approximately ten to twelve weeks after the end of the term in which the degree is conferred. All accounts with Colorado State University-Pueblo must be settled before a diploma will be awarded. Replacement diplomas may be issued upon signed request from the original holder. Please check with the Records Office for current diploma replacement fees.

## POSTHUMOUS DEGREE

Colorado State University-Pueblo has a posthumous degree policy to confer a degree for eligible deceased students. Eligible students are those who were scheduled to graduate either in the term of his/her death or the next term, are in good academic standing, and have support of the department and college.

Please contact the Records Office for specific information on the policy and process.

## REGISTRATION

## Advisement

All students are required to consult an academic advisor before registering for classes each term. The major area assigns academic advisors.

Undeclared academic advising for continuing and new transfer students will be handled by Student Academic Services, located in the Library and Academic Resources Center, Room 267.

All first-year, first-time students are advised through FirstYear Programs located in the Library and Academic Resources Center, Room 165.

## Registration

Registration dates are published in Semester Notes in advance of each registration period. Students can register through PAWS, with their advisor, or in the Records Office.

## Change of Address

Students should keep university authorities informed of their current address. A change in address should be reported immediately to the Records Office or changed on-line through PAWS.

## Immunization Requirement

Colorado law requires all college students born since January 1, 1957, to be immunized against measles, mumps and rubella.

## Proof of immunity consists of:

- Measles-one dose of live measles vaccine administered no sooner than four days before the first birthday and a second dose of live measles vaccine administered at least 4 weeks after the 1st dose or a blood test showing immunity to measles.
- Mumps-one dose of live mumps vaccine administered no sooner than four days before the first
birthday and a second dose of live mumps vaccine administered at least 4 weeks after the 1st dose or a blood test showing immunity to mumps.
- Rubella-one dose of live rubella vaccine administered no sooner than four days before the first birthday and a second dose of live rubella vaccine administered at least 4 weeks after the 1st dose or a blood test showing immunity to rubella.

Medical, religious, or personal exemptions continue to be in effect. The exemption statement, on the certificate provided by the University, must be signed by a physician, parent, or student 18 years and older. In the event of an outbreak, exempted people may be subject to exclusion from school and quarantine.

Prior to registration please have verified immunization records sent to Student Health Services, Colorado State University-Pueblo, Pueblo, Colorado 81001-4901 or fax records to (719) 549-2646.

MMR (measles, mumps, and rubella) vaccine is available in Student Health Services if immunization records indicate that a booster is necessary. For further information, contact the Student Health Services Office at (719) 549-2830.

## UNDERGRADUATE PROGRAMS

## DEGREE REQUIREMENTS

Candidates for the baccalaureate degree must satisfy institutional and general education requirements, as well as specific requirements for a major.

## INSTITUTIONAL REQUIREMENTS FOR ALL BACCALAUREATE DEGREES

1) Students must successfully complete a minimum of 120 semester hours of credit with an earned grade point average of 2.000 for all CSU-Pueblo hours attempted and included in the GPA computation. Courses numbered below the 100 -level cannot be applied toward graduation; (i.e. ENG 099, MATH 091, 098, 099, RDG 099).
2) Students must successfully complete a minimum of 40 credit hours in upper-division courses (numbered 300-499). Upper division credit may be earned only through a four-year institution.
3) A minimum of 60 semester hours must be earned from a four-year institution.
4) A minimum of 30 semester hours of credit (as stated in the program of the major) must be earned in residence (courses taken from Colorado State University-Pueblo) with a minimum grade point average of 2.000 for all resident hours attempted. (Both on-campus and continuing education for-credit courses are considered resident credit.)
5) For degree purposes, CSU-Pueblo accepts a maximum of 60 semester hours from community or junior colleges.
6) For degree purposes, CSU-Pueblo accepts a maximum of 90 semester hours from other four-year institutions.
7) Of the last 30 semester hours earned immediately preceding graduation, no more than 15 may be completed at other colleges or universities.
8) A student may earn a maximum of 30 hours of credit by examination.
9) Students must successfully complete the requirements for an approved major program. Some major programs may require completion of a minor or specific related courses outside the major field.
10) Students must achieve a minimum grade point average of 2.000 in their major field of study. (Some majors and programs require higher GPAs. Refer to specific program sections of this catalog for details.)
11) Students must achieve a minimum grade point average of 2.000 in their minor field of study.
12) Students must complete the Skills Component (English Composition I and II, and Mathematics) with a minimum overall GPA of 2.000 .
13) Students must satisfactorily complete all general education requirements as defined and explained in the General Education Requirements section of the Academic Policies chapter of this catalog.
14) Candidates for the Bachelor of Arts degree must satisfy the foreign language requirement.
15) Degree candidates must file a completed Graduation Planning Sheet with the Records Office no later than the third week of the semester prior to the graduating term (check Semester Notes on-line or with the Records Office for specific deadlines).
16) Degrees are issued only at the close of each semester and summer session.
17) Degrees will be granted at the end of the term during which the student completes all degree requirements.
18) Additional majors, emphasis areas, or minors will not be awarded or posted to a transcript after a baccalaureate degree has been granted.
19) Once a baccalaureate degree has been awarded, the student cannot repeat courses in order to improve the undergraduate grade point average.
20) All accounts with Colorado State University-Pueblo must be settled before a diploma will be awarded or official transcripts will be issued.

## MAJOR REQUIREMENTS

A baccalaureate candidate must select a major and successfully complete all requirements prior to receiving a degree. The minimum number of required semester hours varies by major but must include a departmentally approved program of at least 30 semester hours of course work in the program of study.

## Emphasis Area/Track

Certain programs of study may specify emphasis areas or tracks within majors. Only the official emphasis areas will be recorded on the transcript. Neither emphasis areas nor tracks are printed on the diploma.

## MINOR REQUIREMENTS

Minors consist of a sequence of courses in a specific academic discipline which is established by the department offering the minor. General education courses can apply towards the minor and major(s) unless otherwise stated. Upon graduation, completed majors and minors are recorded on the transcript. Minors are not printed on the diploma.

## DOUBLE (SECOND) MAJOR

Students may choose to complete concurrently the requirements for two majors. Students seeking a double major must satisfy the requirements of both majors as stated by both departments involved under a single degree program. The single degree awarded is that degree appropriate for the first major. A single diploma is issued which displays both majors and both majors are recorded on the student's academic transcript.

## DOUBLE (CONCURRENT) DEGREES

Students may choose to complete concurrently the requirements for two degrees. The second degree must be granted in a major area other than that in which the first baccalaureate degree is granted. The additional credits required for the second degree may be completed concurrently with the credits applying to the first degree and the two degrees may be granted simultaneously, providing all requirements are completed for both degrees. The total hour requirement is 150 earned hours. Simultaneous degrees require two separately completed degree planning sheets. Successful completion of concurrent degrees will result in two diplomas and both degrees are recorded on the student's academic transcript.

## DEGREE-PLUS (SECOND BACCALAUREATE DEGREE)

A second baccalaureate degree may be granted in a major area other than that in which the first baccalaureate degree was granted provided the student has met all requirements for the second baccalaureate degree, including not fewer than 30 semester hours of Colorado State University-Pueblo (resident) credit beyond the first degree with a minimum grade point average of 2.000. The additional 30 hours of credit must have the approval of the department from which the second degree is to be earned. Students seeking a second degree are eligible for the Deans' List.

Degree-plus students seeking a second baccalaureate degree are eligible for scholastic honors. To qualify for graduation with honors, a minimum of 60 semester credits must be completed with CSU-Pueblo after the first degree(s) are conferred. In determining the grade point average of a student, only grades earned after the first degree(s) are considered.

The general education and institutional requirements are considered complete if the student has earned a baccalaureate degree from a regionally accredited college or university, and is accepted to the University as a degree-plus student. Prior credit earned will not be posted to the CSU-Pueblo transcript; however, each department may internally consider approving prior credit earned toward certain requirements.

## BACHELOR OF ARTS DEGREE: FOREIGN LANGUAGE REQUIREMENT

Students seeking the degree of Bachelor of Arts must complete one of the three options listed below:

1) Completion of the second level of a foreign language (course number 102).

- Students may test out of the course.
- Completion of a foreign language course above 102 with a grade of $C$ or better will satisfy the requirement.

2) Completion of FL 100, Introduction to Comparative Linguistics, and ANTHR/ENG 106, Language, Thought and Culture.
3) Completion of the first and second level of American Sign Language.

International students for whom English is a second language may substitute two terms of English courses (excluding ENG 101 and ENG 102) for the foreign language requirement.

## GENERAL EDUCATION REQUIREMENT

Graduates of Colorado State University-Pueblo are lifelong learners who have developed the intellectual and ethical foundations necessary for an understanding of and respect for humanity as well as the knowledge and skills necessary to adapt to the demands of a rapidly changing society.

To help students achieve these goals, the skills component of the CSU-Pueblo general education program is designed to give students the written communication and quantitative reasoning skills necessary for success in their undergraduate studies and future careers. The knowledge component is designed to give students direct experience in the methods of thought and inquiry in three central areas of academic endeavor: the arts and humanities; the social sciences; and the natural and physical sciences.

Upon completion of general education courses, students will:

- Use the English language to communicate with clarity, coherence and persuasiveness, demonstrating critical analysis, logic, precision and rhetorical awareness. (Communication)
- Identify, analyze and evaluate arguments and sources of information to make informed and logical judgments, to arrive at reasoned and meaningful arguments and positions, and to formulate and apply ideas to new contexts. (Critical Thinking)
- Articulate the nature of a multicultural society and recognize the role of aesthetic awareness, foreign language skills, cultural and social perspectives or human and institutional systems of the past and present. (Diversity and Social Responsibility)
- Clarify and evaluate their own values and ethical conduct and analyze the values and ethical conduct of others. (Personal Values and Ethics)
- Apply numeric, symbolic and geometric skills to formulate and solve quantitative problems. (Quantitative Reasoning)
- Apply the scientific method, laboratory techniques, mathematical principles and/or experimental design. (Scientific Reasoning)
- Identify and evaluate wellness principles, including mental, emotional and physical health, needed to make informed choices. (Wellness and Well-Being)

The Colorado guaranteed transfer program (gtPathways) is a set of general education courses that the state guarantees to transfer. Certain courses taken at Colorado public colleges and universities are guaranteed to transfer among all two- and four-year public institutions in the state. Up to 31 credit hours of successfully completed (C- or better) courses in general education will count toward general education or graduation requirements. These courses are not based on equivalencies but meet specific content and competency criteria. Additional information about gtPathways is available at http://highered.colorado.gov/Academics/Transfers/gtPathw ays/. The gtPathways courses offered at CSU-Pueblo are identified in the skills and knowledge components below. They are listed according to their appropriate gtPathways code, which is common among all gtPathways courses in Colorado.

The general education requirement for graduation includes a total of 35 semester credits in two categories:
Skills Component 9 credits
Knowledge Component ..... 26 credits
TOTAL. ..... 35 credits

## I. SKILLS COMPONENT

Candidates for the baccalaureate degree must satisfy institutional and general education requirements, as well as specific requirements for a major. (Students must successfully complete all remedial coursework within their first thirty [30] credits and the Skills Component of general education within their first sixty [60] credits. Transfer students must complete the Skills Component of general education by the end of their second semester at CSUPueblo.)

To complete the Skills component, students must successfully complete courses in the following content areas with a minimum overall GPA of 2.000 :


TOTAL 9 credits

## A. Written Communication

Take each of the following courses:
GT-CO1 (Introductory Writing Course
ENG 101 Composition I................................ 3 credits
GT-CO2 (Advanced Writing Course)
ENG 102 Composition II .............................. 3 credits

## B. Quantitative Reasoning

Take one of the following courses:
GT-MA1 (Mathematics)

| MATH | 109 | Mathematical Explorations ....... 3 credits |
| :--- | :---: | :--- |
| MATH | 121 | College Algebra ................... 4 credits |
| MATH | 124 | Pre-Calculus Math .................. 5 credits |
| MATH | 126 | Calculus and Analytic <br> Geometry I.............................. 5 credits |
| MATH | 156 | Introduction to Statistics ......... 3 credits |
| MATH | 221 | Applied Calculus: An Intuitive <br> Approach ................................. 4 credits |

or any MATH course that includes one of these as a prerequisite. (If a MATH course is taken that is not one of the above listed GT-MA1 courses but does contain one of the above courses as a prerequisite, the MATH course taken will count toward the Quantitative Reasoning requirement at CSU-Pueblo but will not be guaranteed to transfer among all two-and four-year public institutions in the state.)

## II. KNOWLEDGE COMPONENT

To complete the Knowledge component, students must successfully complete courses in the following content areas:

| Humanities ............ (3 courses) | , |
| :---: | :---: |
| History .................. (1 course).. | dits |
| Social Sciences ...... (2 courses) | 6 credits |
| Natural and Physical Sciences |  |
| (2 courses | 8 credit |

TOTAL 26 credits

Students must take one course that is designated as cross-cultural. Courses taken to meet the Knowledge content area requirements may also be used to meet the cross-cultural requirement if they have a (CC) next to their listing.

Your major may recommend certain courses from this list. Refer to your major's catalog description for more information.

## A. Humanities <br> GT-AH1 (Arts and Expression)

| ART | 100 | Visual Dynamics (CC) |
| :--- | :--- | :--- |
| ART | 211 | History of Art I (CC) |
| ART | 212 | History of Art II (CC) |
| MUS | 118 | Music Appreciation (CC) |
| SPN | 130 | Cultures of the Spanish-Speaking <br>  <br>  <br>  <br> GT-AH2 (Literature and Humanities) (CC) |
|  |  |  |
| ENG | 130 | Introduction to Literature |
| ENG/CS | 220 | Survey of Chicano Literature (CC) |
| ENG | 221 | Masterpieces of Literature I |
| ENG | 222 | Masterpieces of Literature II |
| ENG | 240 | Survey of Ethnic Literature (CC) |

## GT-AH3 (Ways of Thinking)

| PHIL | 102 | Philosophical Literature |
| :--- | :--- | :--- |
| PHIL | 120 | Islam and Non-Western Religions (CC) |
| PHIL | 201 | Classics in Ethics |
| PHIL | 204 | Critical Reasoning |
| PHIL | 205 | Deductive Logic |

## GT-AH4 (Foreign Languages)

(must be Intermediate/200 Level)

| GER | 202 | Intermediate German II (CC) |
| :--- | :--- | :--- |
| ITL | 201 | Intermediate Italian I (CC) |
| ITL | 202 | Intermediate Italian II (CC) |
| SPN | 201 | Intermediate Spanish I (CC) |
| SPN | 202 | Intermediate Spanish II (CC) |

Humanities courses not designated as gtPathways
(Courses that will count for Humanities at CSU-Pueblo; but are not guaranteed to transfer among all two-and four-year public institutions in the State.)

| FL | 100 | Introduction to Comparative <br> Linguistics (CC) |
| :--- | :--- | :--- |
| SPCOM | 103 | Speaking and Listening |
| Foreign Language |  |  |
| FRN | 101 | Beginning French I (CC) |
| FRN | 102 | Beginning French II (CC) |
| GER | 101 | Beginning German I (CC) |
| GER | 102 | Beginning German II (CC) |
| ITL | 101 | Beginning Italian I (CC) |
| ITL | 102 | Beginning Italian II (CC) |
| RUS | 101 | Introduction to Russian I (CC) |
| RUS | 102 | Beginning Spoken Russian II (CC) |
| RUS | 201 | Intermediate Russian I (CC) |
| RUS | 202 | Intermediate Russian II (CC) |
| SPCOM 116 | Beginning Sign Language (CC) |  |
| SPCOM 216 | Intermediate Sign Language (CC) |  |
| SPN | 101 | Beginning Spanish I (CC) |
| SPN | 102 | Beginning Spanish II (CC) |

## B. History

## GT-HI1 (History)

| CS | 101 | Introduction to Chicano Studies (CC) |
| :--- | :--- | :--- |
| HIST | 101 | World Civilization to 1100 (CC) |
| HIST | 102 | World Civilization from 1100 to 1800 (CC) |
| HIST | 103 | World Civilization since 1800 (CC) |
| HIST/CS | 136 | Southwest United States (CC) |
| HIST | 201 | US History I |
| HIST | 202 | US History II |

## C. Social Sciences

GT-SS1 (Economic or Political Systems)

| ECON | 201 | Principles of Macroeconomics |
| :--- | :--- | :--- |
| ECON | 202 | Principles of Microeconomics |
| POLSC | 101 | American National Politics |
| POLSC | 200 | Understanding Human Conflict (CC) |
| SOC | 201 | Social Problems |
| SW | 205 | Social Welfare in the United States |


| FRN | 201 | Intermediate French I (CC) |
| :--- | :--- | :--- |
| FRN | 202 | Intermediate French II (CC) |
| GER | 201 | Intermediate German I (CC) |

## GT-SS2 (Geography)

GEOG 103 World Regional Geography (CC)
GT-SS3 (Human Behavior, Culture, or Social Frameworks)

| ANTHR | 100 | Cultural Anthropology (CC) |
| :--- | :--- | :--- |
| CS/SW | 230 | Chicanos: Social and Psychological |
|  |  | Study (CC) |
| MCCNM | 101 | Media and Society |
| PSYCH | 100 | General Psychology |
| PSYCH | 151 | Human Development |
| PSYCH | 222 | Understanding Animal Behavior |
| SOC | 101 | Introduction to Sociology |

Social Science courses not designated as gtPathways (Courses that will count for Social Science at CSU-Pueblo; but are not guaranteed to transfer among all two-and four-year public institutions in the State.)

## ANTHR/ ENG 106

Language, Thought and Culture (CC)
POLSC 202 Comparative Politics (CC) PSYCH/SOC/WS 231

Marriage, Family and Relationships
PSYCH 251 Childhood and Adolescence
SOCSC 209 African American Studies (CC)
WS 100 Introduction to Women's Studies (CC)

## D. Natural and Physical Sciences

## GT-SC1 (Course with Required Laboratory)

BIOL 100/L Principles of Biology with Lab
BIOL 121/L Environmental Conservation with Lab
BIOL 181/L College Biology I/Organismal Bio with Lab
BIOL 182/L College Biology II/Cellular Bio with Lab
BIOL 201/L Botany with Lab
BIOL 223/L Human Physiology \& Anatomy I with Lab
BIOL 224/L Human Physiology \& Anatomy II with Lab
CHEM 101/L Chemistry and Society with Lab
CHEM 111/L Principles of Chemistry with Lab
CHEM 121/L General Chemistry I with Lab
CHEM 122/L General Chemistry II with Lab
CHEM 160/L Introduction to Forensic Science with Lab
GEOL 101/L Earth Science with Lab
GEOL 114/L Oceanography with Lab
PHYS 110/L Astronomy with Lab
PHYS 140/L Light, Energy and the Atom with Lab
PHYS 201/L Principles of Physics I with Lab
PHYS 202/L Principles of Physics II with Lab
PHYS 221/L General Physics I with Lab
PHYS 222/L General Physics II with Lab

Natural and Physical Sciences courses not designated as gtPathways
(Courses that will count for Natural and Physical Sciences at CSU-Pueblo; but are not guaranteed to transfer among all two-and four-year public institutions in the State.)

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BIOL 202/L Zoology with Lab
EXHP 162/L Personal Health with Lab
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## III. COURSE SUBSTITUTIONS/WAIVERS

Substitutions and/or waivers for courses fulfilling general education requirements may be approved by the appropriate department chair and reviewed by the Registrar.

## ASSESSMENT OF STUDENT LEARNING

Colorado State University-Pueblo is committed to providing quality education and to assuring students gain the knowledge and skills necessary to be successful after they graduate. Assessment of student learning in general education, undergraduate majors and minors, certificates, and graduate programs is central to our on-going improvement efforts.

Students will periodically participate in assessment by submitting examples of their course work, participating in focus groups, completing questionnaires, and sitting for standardized exams. Faculty and staff use assessment results to determine the extent to which students demonstrate competency in their field of study, and to improve courses and curricula, teaching practices, and other activities.

The assessment process for all academic programs contains the following common elements:

1) Student learning outcomes for undergraduate major and stand-alone minor programs, certificates, and graduate programs are set by faculty and communicated widely;
2) Student learning outcomes are evaluated by faculty using generally accepted best practices in assessment;
3) Faculty and others use assessment information to improve programs as appropriate; and
4) Information about assessment is reported to stakeholders, including the Board of Governors of the Colorado State University System, the Colorado Commission on Higher Education, professional accreditors, and the Higher Learning Commission.

In recognition of the evolutionary nature of accountability and assessment processes, the University acknowledges that they may change at any time. The University will make reasonable efforts to inform students and other stakeholders of modifications.

The University and its departments also conduct satisfaction and other types of surveys before and after students graduate. Students and alumni are strongly encouraged to respond to these surveys so that the information may be used to improve our campus.

## GRADUATION RATE

Under the Students Right to Know and Campus Security Act of 1990, colleges and universities are required to publish the graduate rate of first-time undergraduate students. This graduation rate is defined as the percentage of first-time undergraduate students who complete their bachelor's degree, at CSU-Pueblo, within six years of their initial enrollment. First-time undergraduate students are defined as full-time, degree seeking undergraduate students who enroll at Colorado State University-Pueblo with no previous college experience.

The University's average graduation rate for the most recent 3 -year average of entering cohorts is $30 \%$, a rate comparable with graduation rates of other regional public institutions in Colorado.

## STUDENT BILL OF RIGHTS-FOUR YEAR GRADUATION AGREEMENT

## 23-1-125. Commission directive -student bill or rights

The General Assembly hereby finds that students enrolled in public institutions of higher education shall have the following rights:
a) Students should be able to complete their associate of arts and associate of science degree programs in no more than sixty credit hours or their baccalaureate programs in no more than one hundred twenty credit hours unless there are additional degree requirements recognized by the commission;
b) A student can sign a two-year or four-year graduation agreement that formalizes a plan for that student to obtain a degree in two or four years, unless there are additional degree requirements recognized by the commission;
c) Students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;
d) Students have a right to know which courses are transferable among the state public institutions of higher education;
e) Students, upon completion of core general education courses, regardless of the delivery method, should have those courses satisfy the core course requirements of all Colorado public institutions of higher education;
f) Students have a right to know if courses from one or more public higher education institutions satisfy the student's degree requirements;
g) A student's credit for the completion of the core requirements and core courses shall not expire for ten years from the date of initial enrollment and shall be transferrable.

## FREEDOM OF EXPRESSION AND INQUIRY

Colorado State University-Pueblo considers freedom of discussion, inquiry, and expression to be consonant with the history and traditions of our country and a cornerstone of education in a free society. CSU-Pueblo is committed not just to valuing and respecting diversity, but also to respect for diverse viewpoints. Any members of the campus community (students, faculty, or staff) who feel that they have been treated unfairly because of their views should contact the Director of AA/EEO, Student Judicial Affairs, and Campus Diversity. CSU-Pueblo encourages members of the University community to engage in discussion, to exchange ideas and opinions, and to speak, write, and publish freely in accordance with the guarantees and limitations of our state and national constitutions.

Faculty and students have not only a right, but also a responsibility, to examine critically the insights, understandings, values, issues, and concerns which have evolved in the various areas of human activity. Accordingly, University-registered student organizations may extend invitations for guest lecturers, exhibitors, performers, and exhibitions of works of art with no restrictions of form or content other than those imposed by law. It is understood that inviting a speaker, performer, or exhibit does not imply concurrence of the University or of the sponsoring organization with the opinions, beliefs, or values expressed. In exercising their rights, members of the University community should understand that the public may judge the institution by their actions. Hence, they should at all times strive to be honest and accurate, exercise appropriate restraint, and show appropriate respect for the opinions of others.

## Advanced Placement (AP) - Equivalency Chart 2013-2014

| AP Exam | Score | Credits Received | Course Number | Class Equivalent |
| :---: | :---: | :---: | :---: | :---: |
| Art History | 3 or 4 | 3 credits | ART 211 | History of Art I |
|  | 5 | 6 credits | ART 211 \& 212 | History of Art I \& II |
| Art, Studio Drawing | 3,4 or 5 | 3 Credits | ART 141 | Drawing I |
| Art, Studio 2D Design | 3,4 or 5 | 3 Credits | ART | Elective |
| Art, Studio 3D Design | 3, 4 or 5 | 3 Credits | ART | Elective |
| Biology | 3 | No Credit |  |  |
|  | 4 or 5 | 8 credits | $\begin{aligned} & \hline \text { BIOL 181/L } \\ & \text { BIOL 182/L } \\ & \hline \end{aligned}$ | Coll Biology I/Organismal Biology \& Lab Coll Biology II/Cellular Biology \& Lab |
| Calculus AB | 3,4 or 5 | 5 credits | MATH 126 | Calculus and Analytic Geometry I |
| Calculus BC | 3 | 5 credits | MATH 126 | Calculus and Analytic Geometry I |
|  | 4 or 5 | 10 credits | MATH 126 MATH 224 | Calculus and Analytic Geometry I Calculus and Analytic Geometry II |
| Chemistry | 3 | 4 credits | CHEM 111/L | Principles of Chemistry with Lab |
|  | 4 | 5 credits | CHEM 121/L | General Chemistry I with Lab |
|  | 5 | 10 credits | $\begin{aligned} & \text { CHEM 121/L } \\ & \text { CHEM 122/L } \\ & \hline \end{aligned}$ | General Chemistry I with Lab General Chemistry II with Lab |
| Chinese Language and Culture | 3 | 3 credits | FL 101 | Intro to Critical Foreign Language I |
|  | 4 | 6 credits | FL 101 \& 102 | Intro to Critical Foreign Language I \& II |
|  | 5 | 9 credits | FL 101, 102 \& Elective | Intro to Critical Foreign Language I, II and Elective |
| Computer Science A | 3 | No Credit |  |  |
|  | 4 or 5 | 4 credits | Computer Info Sys | Elective |
| Economics (Macroeconomics) | 3,4 or 5 | 3 credits | ECON 201 | Principles of Macroeconomics |
| Economics (Microeconomics) | 3,4 or 5 | 3 credits | ECON 202 | Principles of Microeconomics |
| English Language and Composition | 3 | No Credit |  |  |
|  | 4 | 3 credits | ENG 101 | Composition I |
|  | 5 | 6 credits | ENG 101 \& 102 | Composition I \& II |
| English Literature and Composition | 3 | No Credit |  |  |
|  | 4 | 3 credits | ENG 130 | Intro to Literature |
|  | 5 | 6 credits | ENG 101 \& 130 | Composition I \& Intro to Literature |
| Environmental Science | 3 | No Credit |  |  |
|  | 4 or 5 | 3 credits | Biology | Elective |
| European History | 3 | 3 credits | History | Elective |
|  | 4 or 5 | 6 credits | History | Elective |
| French Language and Culture | 3 | 3 credits | FRN 101 | Beginning French I |
|  | 4 | 6 credits | FRN 101 \& 102 | Beginning French I \& II |
|  | 5 | 9 credits | FRN 101, 102 \& Elective | Beginning French I, II \& Elective |
| German Language and Culture | 3 | 3 credits | GER 101 | Beginning German I |
|  | 4 | 6 credits | GER 101 \& 102 | Beginning German I \& II |
|  | 5 | 9 credits | GER 101, 102 \& Elective | Beginning German I, II \& Elective |
| Government \& Politics: Comparative | 3 | No Credit |  |  |
|  | 4 or 5 | 3 | POLSC 202 | Comparative Politics |
| Government \& Politics: United States | 3 | No Credit |  |  |
|  | 4 or 5 | 3 credits | POLSC 101 | American National Politics |
| Human Geography | 3 | No credit |  |  |
|  | 4 or 5 | 3 credits | Geography | Elective |


| Italian Language and Culture | 3 | 3 credits | ITL 101 | Beginning Italian I |
| :---: | :---: | :---: | :---: | :---: |
|  | 4 | 6 credits | ITL 101 \& 102 | Beginning Italian I \& II |
|  | 5 | 9 credits | ITL 101, 102 \& Elective | Beginning Italian I, II \& Elective |
| Japanese Language and Culture | 3 | 3 credits | FL 101 | Intro to Critical Foreign Language I |
|  | 4 | 6 credits | FL 101 \& 102 | Intro to Critical Foreign Language I \& II |
|  | 5 | 9 credits | FL 101, 102 \& Elective | Intro to Critical Foreign Language I, II \& Elective |
| Latin | 3 | 3 credits | FL 101 | Intro to Critical Foreign Language I |
|  | 4 | 6 credits | FL 101 \& 102 | Intro to Critical Foreign Language I \& II |
|  | 5 | 9 credits | FL 101, 102 \& Elective | Intro to Critical Foreign Language I, II \& Elective |
| Music Theory | 3,4 or 5 | 3 credits | Music | Elective |
| Physics B | 3,4 or 5 | 10 credits | $\begin{aligned} & \hline \text { PHYS 201/L } \\ & \text { PHYS 202/L } \end{aligned}$ | Principles of Physics I with Lab Principles of Physics II with Lab |
| Physics C: Electricity \& Magnetism | 3,4 or 5 | 5 credits | Physics | Elective with Lab |
| Physics C: Mechanics | 3.4 or 5 | 5 credits | Physics | Elective with Lab |
| Psychology | 3 | No credit |  |  |
|  | 4 or 5 | 3 credits | PSYCH 100 | General Psychology |
| Spanish Language and Culture | 3 | 3 credits | SPN 101 | Beginning Spanish I |
|  | 4 | 6 credits | SPN 101 \& 102 | Beginning Spanish I \& II |
|  | 5 | 9 credits | SPN 101, 102 \& Elective |  |
| Spanish Literature | 3 | 3 credits | Spanish | Elective |
|  | 4 | 6 credits | Spanish | Elective |
|  | 5 | 9 credits | Spanish | Elective |
| Statistics | 3,4 or 5 | 3 credits | MATH 156 | Introduction to Statistics |
| United States History | 3 | 3 credits | HIST 201 | U.S. History I |
|  | 4or 5 | 6 credits | HIST 201 \& 202 | U.S. History I \& II |
| World History | 3 | 3 credits | HIST 101 | World Civilization I |
|  | 4 or 5 | 6 credits | HIST 101 \& 103 | World Civilization I \& III |

02/26/13

## CLEP Equivalency Chart 2013-2014

| Name of Exam | Course Number | Class Equivalent | ACE Recommended Score |  | Credit | Gen Ed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Through June 2001 | July 2001 to Present |  |  |
| American Government | POLSC 101 | Amer National Politics | 47 | 50 | 3 | SS |
| American Literature | ENG 210 \& 212 | Amer Literature I and II | 46 | 50 | 6 |  |
| Analyzing \& Interpret Literature | ENG 130 \& Elective | Intro to Lit and Elective | 47 | 50 | 6 | H |
| Biology | BIOL | Elective (no Lab credit) | 46 | 50 | 3 | ST |
| Calculus | MATH 126 | Calc \& Analytic Geom I | 41 | 50 | 5 | M |
| Chemistry | CHEM | Elective (no Lab credit) | 47 | 50 | 3 | ST |
| College Algebra | MATH 121 | College Algebra | 46 | 50 | 4 | M |
| College Algebra/Trigonometry | MATH 121 | College Algebra | 46 | 50 | 4 | M |
| College Composition | ENG 101 \& 102 | Composition I \& II |  | 50 | 6 | E |
| College Composition Modular | ENG 101 | Composition I |  | 50 | 3 | E |
| College Mathematics | MATH 109 | Math Explorations | 420-500 | 50 | 3 | M |
| English Comp with Essay | ENG 101 \& 102 | Composition I and II | 420-500 | 50 | 6 | E |
| English Comp without Essay | ENG 101 \& 102 | Composition I and II | 420-500 | 50 | 6 | E |
| English Literature | ENG 231 \& 232 | Lit of England I and II | 46 | 50 | 6 | H |
| Financial Accounting | ACCTG 201 | Prin of Financial Acctg | NA | 50 | 3 |  |
| French Language, Level I | FRN | FRN 101 \& 102 | 42 | 50 | 6 | H |
| French Language, Level II | FRN | FRN 101, 102, 201 \& 202 | 45 | 59 | 12 | H |
| Freshman College Composition | ENG 101 \& 102 | English 101 \& 102 | 44 | 50 | 6 | E |
| German Language, Level I | GER | GER 101 \& 102 | 36 | 50 | 6 | H |
| German Language, Level II | GER | GER 101, 102, 201 \& 202 | 42 | 60 | 12 | H |
| History of US I: to 1877 | HIST 201 | U.S. History I | 47 | 50 | 3 | HS |
| History of US II: 1865-Present | HIST 202 | U.S. History II | 46 | 50 | 3 | HS |
| Human Growth \& Development | PSYCH 151 | Intro Human Develop | 45 | 50 | 3 | SS |
| Humanities | ART | Elective | 420-500 | 50 | 6 | H |
| Info Sys \& Computer Applications | CIS | Elective | 52 | 50 | 3 |  |
| Introduction to Business Law | BUSAD | Elective | 51 | 50 | 3 |  |
| Intro to Educational Psychology | PSYCH | Elective | 47 | 50 | 3 |  |
| Introduction to Psychology | PSYCH 100 | General Psychology | 47 | 50 | 3 | SS |
| Introduction to Sociology | SOC 101 | Intro to Sociology | 47 | 50 | 3 | SS |
| Natural Science | BIOL | Elective (no Lab credit) | 420-500 | 50 | 6 | ST |
| Pre-Calculus | MATH 124 | Pre-Calculus Math | NA | 50 | 5 | M |
| Principles of Macroeconomics | ECON 201 | Prin of Macroeconomics | 44 | 50 | 3 | SS |
| Principles of Microeconomics | ECON 202 | Pirn of Microeconomics | 41 | 50 | 3 | SS |
| Principles of Management | MGMT 201 | Prin of Management | 46 | 50 | 3 |  |
| Principles of Marketing | MKTG 340 | Prin of Marketing | 50 | 50 | 3 |  |
| Social Science \& History | SOC/HIST | Sociology Elective History Elective | 420-500 | 50 | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & \hline \text { SS } \\ & \text { HS } \end{aligned}$ |
| Spanish Language, Level I | SPN | SPN 101 \& 102 | 45 | 50 | 6 | H |
| Spanish Language, Level II | SPN | SPN 101, 102, 201 \& 202 | 50 | 63 | 12 | H |
| Trigonometry | MATH 122 | College Trigonometry | 50 | 50 | 3 | M |
| Western Civilization I | HIST 101 | World Civ to 1100 | 46 | 50 | 3 | HS |
| Western Civilization II | HIST 103 | World Civ 1100-1800 | 47 | 50 | 3 | HS |

**If a student has already earned college credit in an academic course(s) before taking CLEP/DANTES exams, the latter credit will be considered duplicate and will not be awarded

General Education: E=English, H=Humanities, HS=History, M=Math, SS=Social Science, ST=Science \& Technology

## DSST (DANTES) Equivalency Chart 2013-2014

| Name of Exam | CSU-Pueblo Equivalent |  | Acceptable |  | Gen Ed |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Course Number | Course Equivalent |  |  |  |
| Art of the Western World | ART | Elective | 48 | 3 | H |
| Astronomy | PHYS 110 | Astronomy (without lab) | 48 | 3 | ST |
| Business Ethics and Society | BUSAD 302 | Ethics in Business | 400 | 3 |  |
| Business Law II | BUSAD | Elective (Upper Division) | 44 | 3 |  |
| Business Mathematics | NT | Not Transferrable |  |  |  |
| Civil War \& Reconstruction | HIST | Elective (Upper Division) | 47 | 3 |  |
| Criminal Justice | SOC | Elective (Upper Division) | 49 or 400 | 3 |  |
| Substance Abuse | EXHP 201 | Drugs/Healthy Lifestyle (Upper Division) | 49 or 400 | 3 |  |
| Environment \& Humanity | BIOL | Elective (without lab) | 46 | 3 | ST |
| Ethics in America | PHIL | Elective (Lower Division) | 46 or 400 | 3 | H |
| Foundations of Education | ED 202 | Foundation of Education | 46 | 3 |  |
| Fund of College Algebra | MATH | Elective (Lower Division) | 47 or 400 | 3 | M |
| Fundamentals of Counseling | PSYCH | Elective (Lower Division) | 45 | 3 |  |
| General Anthropology | ANTHR | Elective (Lower Division) | 47 | 3 | SS |
| Here's to your Health | EXHP | Elective (Upper Division) | 48 or 400 | 3 | ST |
| History of the Vietnam War | HIST | Elective (Upper Division) | 44 | 3 |  |
| Human Resource Management | MGMT 318 | Human Resource Mgmt | 46 | 3 |  |
| Human/Cultural Geography | GEOG | Elective (Lower Division) | 48 | 3 | SS |
| Introduction to Business | BUSAD 101 | Bus Careers \& Opportunities | 46 or 400 | 3 |  |
| Introduction to Computing | CIS 150 | Computer Info Systems | 45 or 400 | 3 |  |
| Intro to Law Enforcement | SOC | Elective (Lower Division) | 45 | 3 |  |
| Intro to Modern Middle East | POLSC | Elective (Lower Division) | 47 | 3 |  |
| Intro to World Religions | PHIL | Elective (Lower Division) | 48 or 400 | 3 | H |
| Lifespan Developmental Psych | PSYCH 151 | Intro Human Development | 46 | 3 | SS |
| Management Info Systems | MGMT 365 | Management Info Systems | 46 or 400 | 3 |  |
| Money \& Banking | BUSAD | Elective (Upper Division) | 48 | 3 |  |
| Organizational Behavior | MGMT | Elective (Upper Division) | 48 | 3 |  |
| Personal Finance | BUSAD | Elective (Lower Division) | 46 or 400 |  |  |
| Physical Geology | GEOL | Elective (No Lab, Lower Div) | 46 | 3 | ST |
| Principles of Finance | FIN 330 | Prin of Finance | 46 or 400 | 3 |  |
| Prin of Financial Accounting | ACCTG 201 | Prin of Financial Accounting | 49 | 3 |  |
| Principles of Physical Science I | PHYS | Elective (No Lab, Lower Div) | 47 | 3 | ST |
| Principles of Public Speaking | SPCOM 103 | Speaking \& Listening | 47 | 3 | H |
| Principles of Statistics | MATH 156 | Intro to Statistics | 48 | 3 | M |
| Principles of Supervision | BUSAD | Elective (Lower Division) | 46 or 400 | 3 |  |
| Rise \& Fall of the Soviet Union | HIST | Elective (Lower Division) | 45 | 3 |  |
| Technical Writing | ENG | Elective (Lower Division) | 46 | 3 |  |
| Western Europe since 1945 | POLSC | Elective (Lower Division) | 45 | 3 |  |

General Education: $\mathrm{H}=$ Humanities, $\mathrm{M}=$ Math, $\mathrm{SS}=$ Social Science, $\mathrm{ST}=$ Science and Technology

## International Baccalaureate Equivalency Chart 2013-2014

| IB Exam | Score | Credits | Course Number | Class Equivalent |
| :---: | :---: | :---: | :---: | :---: |
| Anthropology - Higher Level | 4-7 | 6 | ANTHR 100 \& Elective | Cultural Anthropology \& Elective |
| Anthropology - Standard Level | 4-7 | 3 | ANTHR 100 | Cultural Anthropology |
| Art History - Standard Level | 4-7 | 3 | Art | Elective |
| Astronomy - Standard level | 4-7 | 4 | PHYS 110/L | Astronomy \& Lab |
| Biology - Higher Level | 4-7 | 8 | $\begin{aligned} & \hline \text { BIOL 181/L } \\ & \text { BIOL 182/L } \end{aligned}$ | Coll Biology I/Organismal Biol \& Lab Coll Biology II/Cellular Biology \& Lab |
| Biology - Standard Level | 4-7 | 5 | Biology | Elective |
| Business Management - Higher Level | 4-7 | 6 | Management | Elective |
| Business Management - Standard Level | 4-7 | 3 | Management | Elective |
| Chemistry - Higher Level | 4-7 | 10 | CHEM 121/L <br> CHEM 122/L | General Chemistry I \& Lab General Chemistry II \& Lab |
| Chemistry - Standard Level | 4-7 | 4 | CHEM 111/L | Principles of Chemistry \& Lab |
| Computer Science - Higher Level | 4-7 | 6 | CIS | Elective |
| Computer Science - Standard Level | 4-7 | 3 | CIS | Elective |
| Dance - Higher Level | 4-7 | 3 | EXHPR | Elective |
| Dance - Standard Level | 4-7 | 3 | EXHPR | Elective |
| Economics - Higher Level | 4-7 | 6 | ECON 201 \& 202 | Prin of Macro and Micro Economics |
| Economics - Standard Level | 4-7 | 3 | ECON | Elective |
| English A1 - Higher Level ( Native Language) | 7 | 12 | ENG 101, 102, 130, and Elective | Composition I, Composition II. Intro to Literature, and Elective |
|  | 6 | 9 | ENG 101, 102, 130 | Composition I, Composition II, and Intro to Literature |
|  | 5 | 6 | ENG 101 \& 130 | Composition I and Intro to Literature |
|  | 4 | 3 | ENG 130 | Introduction to Literature |
| English A1 - Standard Level | No Credit |  |  |  |
| Environmental Systems - Standard Level | 4-7 | 4 | BIOL | Elective |
| Film - Higher Level | 4-7 | 6 | ENG | Elective |
| Film - Standard Level | 4-7 | 3 | ENG | Elective |
| Foreign Language A1 - Higher Level (Native Language) | 4-7 | 6 | FRN, GER, ITL, SPN | Upper Division Foreign Language Elective |
| Foreign Language A1 - Standard Level (Native Language) | No Credit |  |  |  |
| Foreign Language B - Higher Level (Non-Native Language) | 6-7 | 15 | $\begin{aligned} & \hline \text { FRN, GER, ITL, SPN } \\ & 101,102,201,202, \& \\ & 303 \\ & \hline \end{aligned}$ | Beginning I, II, Intermediate I, II and Conversation \& Composition |
|  | 5 | 12 | FRN, GER, ITL, SPN 101, 102, 201 \& 202 | Beginning I, II, Intermediate I and II |
|  | 4 | 9 | $\begin{aligned} & \text { FRN, GER, ITL, SPN } \\ & \text { 101, 102, \& } 201 \\ & \hline \end{aligned}$ | Beginning I, II, and Intermediate I |
| Foreign Language B - Standard Level (Non-Native Language) | 6-7 | 12 | FRN, GER, ITL, SPN 101, 102, 201, \& 202 | Beginning I, II, Intermediate I and II |
|  | 5 | 9 | FRN, GER, ITL, SPN 101, 102 \& 201 | Beginning I, II, and Intermediate I |
|  | 4 | 6 | $\begin{aligned} & \text { FRN, GER, ITL, SPN } \\ & 101 \& 102 \end{aligned}$ | Beginning I and II |
| Foreign Language AB - Standard Level (Non-Native Language) | 4-7 | 6 | FL 101 \& 102 | Intro Critical Foreign Language I, II |
| Geography - Higher Level | 4-7 | 6 | GEOG 101, 103 | Physical Geog \& World Regional Geog |
| Geography - Standard Level | 4-7 | 3 | GEOG 103 | World Regional Geography |


| History of Africa - Higher Level | $4-7$ | 6 | HIST | Elective |
| :--- | :--- | :--- | :--- | :--- |
| History of the Americas - Higher Level | $4-7$ | 6 | HIST 201 \& 202 | U. S. History I and II |
| History of Asia/M.E./OCE - Higher Level | $4-7$ | 6 | HIST | Elective |
| History of Europe - Higher Level | $4-7$ | 6 | HIST | Elective |
| History of Islamic World - Higher Level | $4-7$ | 6 | HIST | Elective |
| History of Islamic World - Standard Level | $4-7$ | 6 | HIST | Elective |
| Latin - Higher or Standard Level | $4-7$ | 3 | FL 101 | Intro Critical Foreign Language |
| Math Studies - Standard Level | $4-7$ | 4 | MATH 121 | College Algebra |
| Mathematics - Higher Level | $4-7$ | 10 | MATH 126 \& 224 | Calculus \& Analytic Geometry I \& II |
| Mathematics - Standard Level | $4-7$ | 5 | MATH 126 | Calculus \& Analytic Geometry I |
| Math (Further) - Standard Level | $4-7$ | 3 | MATH 109 | Mathematical Explorations |
| Music - Higher Level | $4-7$ | 3 | MUS 150 | Music Theory I |
| Music - Standard Level | $4-7$ | 3 | MUS 118 | Music Appreciation |
| Philosophy - Higher Level | $4-7$ | 6 | PHIL 102, \& Elective | Philosophical Literature, \& Elective |
| Philosophy - Standard Level | $4-7$ | 3 | PHIL 102 | Philosophical Literature |
| Physics - Higher Level | $4-7$ | 10 | PHYS 221/L \& 222/L | General Physics I \& II with Labs |
| Physics - Standard Level | $4-7$ | 4 | PHYS 140/L | Light, Energy, and the Atom with Lab |
| Psychology - Higher Level | $4-7$ | 6 | PSYCH 100 \& Elective | General Psychology \& Elective |
| Psychology - Standard Level | $4-7$ | 3 | PSYCH 100 | General Psychology |
| Theatre - Higher Level | $4-7$ | 6 | TH | Elective |
| Theatre - Standard Level | $4-7$ | 3 | TH | Elective |
| Visual Arts - Higher Level | $4-7$ | 6 | ART | Elective |
| Visual Arts - Standard Level | $4-7$ | 3 | ART | Elective |
| World Religions - Standard Level | $4-7$ | 3 | PHIL | Elective |

03/20/13

## SPECIALACADEMIC PROGRAMS AND SERVICES

## SPECIAL ACADEMIC PROGRAMS

## UNIVERSITY STUDIES

The University Studies Program offers students opportunities to take courses in areas generally not available through the University's departmental structures. These include such interdisciplinary programs as the President's Leadership Program, First-Year Experience, as well as individual courses that will contribute to the student's University education but are not available through other departments or programs.

## PRESIDENT'S LEADERSHIP PROGRAM

## Director: Shelly Moreschini

The President's Leadership Program (PLP) at Colorado State University-Pueblo is a four-year, competitive, cohortbased, multidisciplinary program with a strong experiential emphasis that leads to a minor in Leadership Studies. The curriculum includes a core of five three-credit-hour courses and a minimum of three credit hours of approved elective courses selected from leadership-related courses offered on campus.

The vision of the President's Leadership Program is to create multiculturally-competent transformational leaders who will serve the communities in which they live and work. Crucial to the development of participants' leadership skills and practices are the acquisition of intercultural competence, social consciousness and civic responsibility, as well as ethical and altruistic attitudes and behaviors.

Throughout their time in the program, PLP scholars may be eligible for scholarship consideration and/or financial assistance, based on merit and program participation.

## President's Leadership Program Goals

- To provide a sequence of courses and professional placements centered in the concept of transformational leadership.
- To offer challenging experiential opportunities for students in diverse leadership settings.
- To showcase individual student interests and goals through mentorship, personal development strategies, and internship placements.


## Requirements for PLP Scholars

Students must remain in good academic standing within the program, maintaining a minimum cumulative grade point average of 3.000 . Program participants are expected to be involved in extra-curricular activities on campus and in the community, and must adhere to the PLP Standards
and Expectations, as outlined in the PLP Student Handbook distributed at the Scholar Orientation and Retreat each August. All students are expected to volunteer 30 hours of community service each semester.

## Student Learning Outcomes

Scholars in the President's Leadership Program will complete the minor in Leadership Studies. Through this minor program, students will focus on six learning outcomes as described below:

- Self-Leadership: PLP scholars will understand, synthesize, and evaluate their personal readiness for leadership by communicating effectively through written and oral means as measured by course assignments and a final portfolio.
- Ethics: PLP scholars will manifest an understanding of leadership ethics and service to others, and illustrate, analyze and assess ethical behaviors as demonstrated in written work and oral presentation.
- Leadership Theory: PLP scholars will describe, apply and criticize major leadership theories, and will be prepared to assess their own leadership qualities in relation to theoretical principles.
- Critical Thinking: PLP scholars will understand the methods and skills needed for critical thinking and decision-making and be prepared to interpret situations and cases beyond surface arguments.
- Problem Solving: PLP scholars will apply problemsolving skills through faculty-directed classroom project assignments and by taking on volunteer and community service projects.
- Civic Engagement: PLP scholars will understand the importance of civic engagement and community activism as measured through volunteerism, community and campus service, team projects and class assignments.


## Outcomes Assessment Activities

Assessment of the Leadership Studies minor is the responsibility of the PLP faculty, staff, and students. The following tracking processes are in place to gather information and evaluate student progress in the following ways:

- Course syllabi, sample project portfolios and presentations, and related survey data will remain on file in the office of the President's Leadership Program for use in appropriate assessment activities.
- The executive director and academic director routinely advise students on the Leadership Studies minor and maintain academic records and progress reports on current minors.
- PLP students participate in nationally-normed standardized testing on an annual basis.
- Scholar reports and portfolios are reviewed on a semester by semester basis to determine levels of learning outcome success.
- Students are asked to evaluate all minor courses, serve on PLP committees, and to serve on focus groups to provide feedback and input for PLP activities. Student volunteer hours are tracked, reviewed, and analyzed each semester.
- PLP faculty participate in Colorado Leadership Alliance activities to ascertain best practices and to arrange leadership activities for students in the statewide organization. PLP faculty are members of the International Leadership Association.


## Program Admissions

All program participants must meet the minimum program admission requirements and must submit all of the components of the application requirements. Applicants will be interviewed by members of the PLP Selection Committee as part of the selection process. Students who have been accepted into other college-level leadership programs, and wish to transfer into CSU-Pueblo's PLP must apply through the Director, be interviewed by a PLP Selection team, and will be accepted at the discretion of this committee based on the admissions criteria required of first-year students, as noted below.

## Admissions Criteria

Potential scholars must be admitted to Colorado State University-Pueblo as first-time, full-time students. Applications to the PLP must demonstrate academic excellence, leadership potential, and community service experience.

## Application Process

In addition to meeting the minimum academic requirements for admission to the President's Leadership Program, students must submit the following:

- PLP Application Form (available online on the CSUPueblo website).
- Essay on a Leadership Topic (see application form).
- Resume (including personal objectives, education, work experience, school and community leadership experiences, honors and awards).
- Two letters of recommendation from professionals (teachers, principals, pastors, employers, etc.).
- Copy of Official High School Transcript.


## Timelines

There are rolling deadlines. To meet the preferred deadline, application materials must be postmarked and/or received by the President's Leadership Program Office or
the CSU-Pueblo Office of Admissions by March 1st. The second deadline is May 1st. The applications will be screened and interviews with the Selection Committee will be scheduled.

## Leadership Studies Minor

(Prerequisite: Acceptance into President's Leadership Program)

## Requirements:

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| US | 160 | Principles of Leadership.......................... 3 |

Students may choose from the following electives to complete the minor in Leadership Studies. Students are encouraged to diversify their course selections. Only one course may count in both the student's major and the Leadership Studies minor. Special topics courses related to leadership and new courses approved in other disciplines may also be approved on a case by case basis. Students should check with the PLP Academic Advisor for a current roster of specific additions. (In some cases, prerequisites or permission of instructor may be required for enrollment. See Course Descriptions section of catalog for information and requirements about all courses.)

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| BUSAD | 270 | Business Communication ................... 3 |
| BUSAD | 302 | Ethics in Business ............................. 3 |
| EXHP | 436 | Exercise Assessment \& Leadership ..... 3 |
| MCCNM | 370 | Non-Profit Organizations and Communication. $\qquad$ |
| MGMT | 201 | Principles of Management .................. 3 |
| MGMT | 301 | Organizational Behavior ..................... 3 |
| PHIL | 201 | Classics in Ethics.............................. 3 |
| POLSC | 405 | The American Presidency .................. 3 |
| PSYCH | 311 | Theories of Personality ...................... 3 |
| PSYCH | 315 | Industrial/Organizational Psychology.... 3 |
| $\begin{array}{r} \text { PSYCH/ } \\ \text { SOC } \end{array}$ | 352 |  |
| PSYCH | 464 | Systems of Counseling and Psychotherapy |
| REC | 270 | Outdoor Leadership I......................... 2 |
| REC | 350 | Leadership and Ethics ....................... 3 |
| REC | 370 | Outdoor Leadership II........................ 2 |
| SOC | 432 | Organization Theory .......................... 3 |
| US | 491 | Special Topics .................................. 3 |

The President's Leadership Program staff recommends at least one course focusing on the issues of diversity, either as a general education offering or as it relates to leadership, to prepare students for leadership in a multicultural world. Considering the benefits of a multidisciplinary education, students should select electives from more than one discipline.

## UNIVERSITY HONORS MINOR PROGRAM

## Director: Dr. Marc Pratarelli

The University Honors minor at CSU-Pueblo provides high-achieving students with enhanced learning opportunities to stimulate their engagement and development, both within an intellectual community of scholars, and as citizens of the wider university community and the world. The Honors minor curriculum provides students with special opportunities for interaction with faculty in thought-provoking seminars and intensive guided research, as well as experiential and servicelearning projects.

## Program Goals

- To provide opportunities for enriched work for highachieving students.
- To offer small classes that permit challenging study of advanced material and increased interaction with faculty who will serve as academic and preprofessional mentors.
- To provide students with an interdisciplinary approach to academic research through seminars and experiential learning, culminating in individual projects supervised by faculty.


## Expected Student Learning Outcomes

Honor Program students should be able to:

- Identify interdisciplinary approaches to problems of data collection and epistemology.
- Analyze how diverse disciplines develop significant research agendas.
- Employ critical thinking skills to evaluate academic and professional approaches to design and testing.
- Formulate independent research projects.
- Describe the impact of their academic field upon the wider community through practicum.
- Apply leadership skills in service-learning experiences.


## Program Admission Requirements

Criteria for admission to the CSU-Pueblo University Honors Minor Program:

1) Incoming freshmen to Colorado State UniversityPueblo are invited to apply for the honors program if
they graduated high school with a GPA of 3.8 or a minimum combined ACT score of 26 , or a minimum combined SAT score of 1200 . Students meeting these criteria who wish to apply may do so as well.
2) Undergraduate students already enrolled at CSUPueblo with a minimum grade point average of 3.5 are invited to apply for membership in the Honors Program. Two letters of recommendation from faculty members of CSU-Pueblo addressed to the Honors Program Director are also required for admission into the program.
3) Admission of non-honors students into honors courses is at the discretion of the faculty member teaching the course, with the approval of the Honors Director. Students may enroll in a maximum of two honors courses. They may, however, apply for admission to the Honors Minor Program if their overall grade-point average and their honors coursework are commensurate with the general standards for admission.

## General Requirements

- University Honors Minor Program students must maintain a 3.5 cumulative GPA at CSU-Pueblo to remain in good standing in the program. Students who do not meet the requirement will receive a single one semester probation period permitted before they are removed from the program and forfeit program awards. Students must maintain appropriate Honors standards as well, and may also be removed from the program by the Honors Director, in consultation with the Honors Steering Committee, for failing to uphold other Program commitments (e.g., failing Honors courses, failing to attend Honors seminars, and inappropriate behavior on service-learning assignments).


## Honors Minor Requirements

| Courses | Titles |
| :--- | :--- |$\quad$ Credits

TOTAL
21

## Outcomes Assessment

Assessment for Honors seminars is based on short research papers each semester involving the use of
academic resources and material covered by seminar speakers. Assessment of service learning experiences is based on journals submitted by students and on evaluations provided by site supervisors. Assessment of Honors courses and supervised research will be conducted by the faculty supervisor in the appropriate academic department.

## Contact Information

Contact the University Honors Program for further information at: (719) 549-2949.

## COOPERATIVE EDUCATION

Cooperative education provides an educational plan in which periods of study and periods of career-related work are combined in one program, individualized for each student. Students earn a salary and acquire academic credit in their majors while experiencing, on a temporary basis, their chosen career.

The experience gives cooperative education students an opportunity to become well-acquainted with the employer which, in many cases, leads to permanent placement upon graduation. All cooperative programs are administered by the academic departments.

## UNIVERSITY PROGRAMS AND SERVICES

## ATHLETICS

The Colorado State University-Pueblo Athletic Department offers 16 varsity intercollegiate sports, which compete at the NCAA Division II level.

For the women, CSU-Pueblo offers golf, soccer, basketball, tennis, volleyball, softball, cross-country, and indoor and outdoor track.

On the men's side, the ThunderWolves compete in soccer, basketball, baseball, tennis, golf, football, and wrestling.

CSU-Pueblo is a member of the Rocky Mountain Athletic Conference (RMAC), which consists of 14 member institutions throughout the states of Colorado, New Mexico, South Dakota, and Nebraska.

Pack Athletics have won one national championship, 72 RMAC championships, $\underline{70}$ national tournament appearances, six regional tournament championships and 33 team top ten finishes. CSU-Pueblo has also crowned 183 All-Americans, of which 36 have been named in the past 10 years.

For more information, please visit the CSU-Pueblo athletics website at http://www.gothunderwolves.com.

## Rawlings Outdoors Sports Complex

Colorado State University-Pueblo's Rawlings Sports Complex houses the CSU-Pueblo baseball, softball and men's and women's soccer programs.

The Rawlings Sports Complex features a 2,500 -seat baseball facility, Rawlings Field, and the four-diamond Rawlings Softball Complex, as well as the Rawlings Soccer Complex. The areas are used by sports teams for training and for use by student and public groups.

## Neta and Eddie DeRose ThunderBowl

Home of CSU-Pueblo's football and women's track and field programs, the ThunderBowl features 6,500 seats, a synthetic turf field, a ten-lane all-weather track, throwing, jumping and pole vault areas, as well as a 27,000 squarefoot field house, which includes a 4,300 square-foot strength and conditioning complex for all 16 of CSUPueblo's intercollegiate athletics programs, team meeting areas, student-athlete study-areas and lounges, and track and football coaches' offices.

## Massari Arena

Massari Arena seats 3,900 fans and is the home of CSUPueblo men's and women's basketball, wrestling, and volleyball programs. The arena includes one section of premium chair back seating and a luxury box overlooking the arena, dubbed "The Wolf Pack Room".

## CENTER FOR INTERNATIONAL PROGRAMS

The Center for International Programs (CIP) is responsible for the recruitment, admission, enrollment, and retention of international students at CSU-Pueblo. Some of the services provided are: housing placement, airport pick-up, student orientations, cultural activities, Bureau of Citizenship and Immigration Services (BCIS) advising, assistance with academic concerns, and English tutorial services. All services are free of charge.

CIP staff maintains an open door policy, ensuring that every international student has an opportunity to be heard and helped when needed. Typically, there are at least 40 countries represented during any given term. Student academic success within the entire international population is the primary goal.

- Orientation: All new international students to CSUPueblo are required to participate in a two-day mandatory orientation upon arrival. During orientation, new students will be administered English, math, and reading placement exams. Results will indicate registration into the appropriate course(s) and do not interfere with admission to the University.
- Activities: International students are encouraged to participate in all activities offered by CSU-Pueblo. In addition, the CIP hosts individual events throughout the academic year. Annual events include the International Kite Fly, welcome and graduation parties, the International Extravaganza, holiday celebrations, and field trips.
- English Language Institute: The ELI of CSUPueblo, a Continuing Education program, offers those lacking English proficiency a way to become proficient for entrance into university level coursework. ELI provides high quality English instruction in a fullyintegrated university setting. Students are offered conditional letters of acceptance into regular major programs, pending proof of language proficiency. Contact: intprog@colostate-pueblo.edu for further information.
- Sports: International students are encouraged to participate in collegiate and intramural sports offered at CSU-Pueblo. In addition, the CIP supports and organizes informal sporting teams as desired.
- English Tutoring: All international students are able to obtain free tutoring, as needed, in the area of language skill development. Individual and group appointments can be made accordingly in the CIP. Other academic tutoring is available across campus in various academic subjects.

The CIP is also the origination point for those CSU-Pueblo students interested in Study Abroad and Student Exchange Programs. Such opportunities allow CSUPueblo students to study in accredited universities throughout the world.

## National Student Exchange (NSE)

National Student Exchange (NSE) is a program of over 200 colleges and universities that assist undergraduate students in attending American universities in almost every state and several U.S. territories for up to one year.

Instead of crossing oceans, NSE students cross state, regional, provincial, and culture borders.

Federally-funded financial aid may be used by eligible NSE participants enrolling at U.S. member colleges and universities.

Interested students can contact the Center for International Programs (CIP) and speak with the NSE coordinator, who will assist you in finding the right university with the right combination of courses, facilities, and environment to meet student's academic, personal needs, and interests. The CIP is located in Occhiato University Center, Underground Annex, Room 030. Phone: (719) 549-2329/or 549-2764.

## Study Abroad Programs

Colorado State University-Pueblo values the benefit of an education that includes international experiences. Consequently, the University encourages students with second language proficiency, when appropriate, to enroll in the CSU-Pueblo Study Abroad Program. Students wishing to increase cultural awareness, second language proficiency or competency in subjects offered in international settings, are encouraged to contact the CIP. Study abroad opportunities for CSU-Pueblo students are presently available in accredited universities in: China, France, Germany, Italy, Korea, Mexico, and Thailand. Some schools teach in English; therefore, second language proficiency may not be required.

For more information call (719) 549-2329, e-mail: intprog@colostate-pueblo.edu or visit the CIP website at http://www.colostate-pueblo.edu/InternationalPrograms.
Contact may be made directly with the study abroad coordinator by visiting Room 030 in the Underground Annex of the Occhiato University Center (OUC).

## CONTINUING EDUCATION

The University makes available a broad array of credit and non-credit courses, seminars and workshops through the Division of Continuing Education. Some programs are offered on campus and others at off-campus sites more convenient to persons living outside of Pueblo.

Off-campus instruction sites include Colorado Springs Citadel Center and Fort Carson.

Both degree- and non-degree seeking students may participate in Continuing Education programs. (Only degree-seeking students are eligible for financial aid.) Persons desiring classification as degree-seeking students in the External Degree Completion Program must fill out the External Degree Completion Application. Credit courses taken through the Colorado State UniversityPueblo Continuing Education Program have the same credit value as those conducted on campus and may be used in meeting the institutional residency requirement.

A primary aim of the Division of Continuing Education is to provide courses to part-time students. A variety of educational methods - classroom instruction, correspondence courses, on-line courses, conferences, workshops and seminars - are utilized to expand educational access and meet the needs of students at convenient times and settings. Students may earn academic credit toward a degree, study for career advancement, or pursue cultural and avocational interests.

Continuing education courses are of varied lengths. Intensive classes usually are held in the evening or on weekends for the convenience of working students.

Independent study courses offer students the opportunity to complete print-based courses at their own pace over a six month time period. Although the majority of course offerings are initiated by the University, courses may originate through requests by individuals and interested groups. Such special request courses may take place either on or off campus.

The division also administers the Senior to Sophomore Program in the public schools. The program enrolls eligible high school students in dual-credit courses which are delivered by highly qualified teachers on the high school campus.

In-house training programs, administered under the Conference and Short Courses Program, are available to meet the ever-changing needs of business and industry. The programs can be designed to meet the specific needs of an organization and may be presented at the company site or, if requested, at the University. Similar services are available to school districts.

For more information contact the Dean of the Division of Continuing Education: phone 1-800-388-6154, or at our website: http://coned.colostate-pueblo.edu.

## CSU-PUEBLO BOOKSTORE

The Colorado State University-Pueblo Bookstore is conveniently located in the Occhiato University Center and is open to the campus community and to the general public throughout the year. The bookstore's essential role is to serve as the primary academic bookseller and provider of supplies for students and the campus in support of the academic programs and events of the University community. Regular bookstore hours are Monday-Thursday from 8:00 a.m. to 5:30 p.m. and Friday from 8:00 a.m. to 5:00 p.m. Extended store hours for the Textbook Rush period are posted at the beginning of the Fall and Spring semesters.

The CSU-Pueblo Bookstore carries a variety of products including textbooks and course materials, general books, office and art supplies, laptops, officially licensed ThunderWolves apparel and gifts, and assorted food and snack products. Computer software at educational prices is available to students, faculty, and staff. The CSUPueblo Artist Showcase, a cooperative venture between the University Art Department and bookstore, features the art and pottery of students, faculty, and alumni with items displayed available for purchase. Various sales and special events are held in the bookstore throughout the year. ThunderWolves apparel, gifts, and souvenirs are available at the Neta \& Eddie DeRose ThunderBowl for all home football games and at the Massari Arena for many other Game Day sports events. Customers may take advantage of convenient 24/7/365 shopping online through the bookstore website at:
http://www.csupueblobookstore.com.

To help keep educational expenses down, the bookstore staff aggressively seeks as many used textbooks as possible to offer students for their courses. The store conducts several on-campus buybacks throughout the year and online through its website. Textbook buybacks give students a financial return for their unwanted textbooks, and recycles these books both on campus and in the general college store market. Students can save money on textbooks by taking advantage of the online "Early Bird" discount each semester as part of the Textbook Reservation program: July 15-August 15 for Fall semester and December 1-31 for Spring semester. Students with financial aid awards can check online each semester for details on how they may use their aid for textbooks and the Early Bird discount.

Visa, MasterCard, Discover, debit cards, and charges to Student Accounts may be used at the bookstore and online when making purchases. Current students, faculty, and staff may load their campus ID card with ThunderBucks that can be used at the bookstore and get a $10 \%$ discount on many items (textbooks, software, calculators, and markdowns are excluded).

We invite you to visit the bookstore in person, to contact us at (719) 549-2146 during our regular store hours, and to email us anytime at bookstore@colostate-pueblo.edu.

## FIRST-YEAR PROGRAMS

First-Year Programs seeks to ease the transition into college life for first-year students. Our student-focused advisors assist students so as to ensure a successful first year and beyond. Advisors connect with students on a regular basis so as to ensure academic success and offer access to a variety of resources that are available such as career planning, academic skills assessments, tutoring, and various social and academic activities.

## First-Year Student Advising

All first-year, first-time students are advised through FirstYear Programs. The First-Year Advising program advises and orients new students during their first year in college. This program advises students for appropriate course selection and gives students the information and guidance they need to be successful college students. First-Year Programs is located in the Library and Academic Resources Center (LARC), Room 151, and can be reached by phone at (719) 549-2584. Also, look on the web at http://www.colostate-pueblo.edu/fyp.

## FOOD SERVICE LOCATIONS

Campus food services are located in several areas on campus for your convenience. They are as follows:

Columbine Café is located on the main floor Occhiato University Center. This location is the main dining operation for residential students dining on a meal plan. It is also open to the public for a one time door rate. It is open for service during the operating hours below.

## Monday thru Friday

| Bre | 7:15 a.m. | 9.30 a.m. |
| :---: | :---: | :---: |
| Continental | 9:30 a.m. | 11:00 a.m |
| Lunch | 11:00 a.m. | 2:30 p.m |
| Late Lunch. | 2:30 p.m. | 5:00 p. |
| Dinner | 5:00 p.m. | 7:15 p |

## Saturday and Sunday



La Cantina is located on the lower level of the Occhiato University Center and is open during the Fall \& Spring semesters while classes are in session. There is a wide variety of retail dining concepts from made-to-order sandwiches, pizzas, burritos, beverages, and other grab-and-go items. The hours of operation are:
Monday thru Thursday..............9:00 a.m. - 8:00 p.m.
Friday....................................9:00 a.m. - 3:30 p.m.

The Pavilion is located just west of the Hasan School of Business. This location serves as a "grab-and-go" for food and drink. The hours of operation are Monday through Friday, 7:30 a.m. - 1:30 p.m.

The Espresso Cart is located on the main floor of the Life Science Building. The hours of operation are Monday through Friday, 7:30 a.m. - 1:30 p.m.

The Bistro is located on the main level of the Culebra Residence Hall on the north side of campus. Late night snacks and other grab-and-go favorites are offered daily. The hours of operation are as follows:
Monday thru Thursday.............4:00 p.m. - 12:00 a.m.
Friday and Saturday ...............6:00 p.m. - 10:00 p.m.
Sunday .................................4:00 p.m. - 12:00 a.m.

Café Libro is located on the main level of the Library on the west side of campus. They offer made-to-order coffees, drinks, and grab-and-go food items. The hours of operation are as follows:

| Monday thru Thursday............7:00 a.m. - 9:00 p.m. |  |  |
| :---: | :---: | :---: |
| Friday.. | 7:00 a.m. | 4:00 p.m. |
| Saturda | 10:00 a.m. | 4:00 p.m. |
| Sunday | 1:00 p.m. | 9:00 p.m. |

## ROCKY MOUNTAIN PBS/KTSC-TV

KTSC-TV is a non-commercial, public television station housed in the Buell Communications Center on the campus of Colorado State University-Pueblo. KTSC is the regional affiliate of Rocky Mountain PBS, a statewide PBS-member network serving 99\% of Coloradans with stations in Pueblo, Denver, and Grand Junction along with the Tim Gill Center for Public Media in Colorado Springs.

Each year more than 300 hours of local programming is produced out of the studio at CSU-Pueblo. Six hours per week of local programming is produced from September through May with additional productions taking place during the summer months. Through a unique relationship between CSU-Pueblo and Rocky Mountain PBS, students engage in hands-on learning through the production of local educational programs such as Matchwits, Homework Hotline, Super School News, and Colorado State of Mind.

## MATH LEARNING CENTER

The Math Learning Center (MLC) at CSU-Pueblo gives students a place to work in a collaborative and supportive environment. Located in PM 132, students can drop by anytime. The center is open Monday through Friday during each semester and some weekend hours. Once there, students receive help from qualified tutors. The MLC is staffed by tutors who are upper division math, physics, biology, chemistry or engineering students. The tutors are trained to help students work through their own problems in classes as diverse as algebra, calculus and statistics. The center also has computers dedicated to math students working with online homework. The MLC provides CSU-Pueblo students a place and a plan for success in college level and remedial math classes. For more information, call the Math Learning Center at 5492189.

## OCCHIATO CENTER

The Occhiato University Center ascribes to the "Role of the College Union" developed by the Association of College Unions International which states that:

1) The union is the community center for the college, for all members of the college family - students, faculty, administration, alumni, and guests. It is not just a building: it is also an organization and a program. Together they represent a well-considered plan for the community life of the college.
2) As the "living room" or "hearthstone" of the college, the union provides for the services, conveniences, and amenities the members of the college family need in their daily life on campus and for getting to know and understand one another through informal association outside the classroom.
3) The union is part of the educational program of the college. As the center of college life, it serves as a laboratory of citizenship, training students in social responsibility and for leadership in our democracy. Through its various boards, committees, and staff, it provides a cultural, social, and recreational location aiming to make free-time activity a cooperative factor with study in education. In all its processes it encourages self-directed activity, giving maximum opportunity for self-realization and for growth in individual social competency and group effectiveness. Its goal is the development of persons as well as intellects.
4) The union serves as a unifying force in the life of the college, cultivating enduring regard for and loyalty to the college.

The Occhiato University Center (OUC) houses many student service areas. The departments housed in the OUC are: the CSU-Pueblo Bookstore and Copy Center, Auxiliary Services, Student Computer Lab, Dining Services with two different eating areas for you to select from (Columbine Café and La Cantina), Student Affairs, Student Health Center, Center for International Programs, Diversity Resource Center, Associated Student Government, Office of Student Activities, Affirmative Action, and Student Conduct/Student Judicial Affairs.

The Occhiato University Center is operated by the department of Auxiliary Services located in OUC, room 102. During the academic year, the Occhiato University Center is open regularly from 7:00 a.m. to 10:00 p.m. Monday through Thursday and 7:00 a.m. to 8:00 p.m. on Friday with additional hours as required for scheduled events. The Center is open on Saturday 8:00 a.m. to 8:00 p.m. and Sunday from 8:00 a.m. to 10:00 p.m. with additional hours as required for scheduled events. Hours may vary during summer and when classes are not in session. The OUC hours can be extended to accommodate special events, conferences, and meetings; however, there will be fees associated with this request in order to provide coverage in the building.

## Identification Cards

All students enrolled must purchase an ID card also called the ThunderCard in the Auxiliary Services Office located in Room 102 of the Occhiato University Center. The office is open Monday through Friday, from 8:00 a.m. to 5:00 p.m. There is a $\$ 10$ charge for all new ID's. Please contact Auxiliary Services office for the fee structure for replacement or reactivation of an old ID card. In addition the ThunderCard may be used to add "ThunderBucks" to the card (like a declining balance debit card) which can be purchased and placed on your ThunderCard. Thunderbucks can be used for purchases of food items at any food service location on campus plus you receive a $10 \%$ discount and pay no sales tax on the food purchased.

In addition you may use your ThunderCard to purchase anything needed in the University Bookstore (there is a $10 \%$ discount on all items except textbooks and computer software), laundry services in the residence halls and some vending machines on campus. The staff in the Auxiliary Services Office would be happy to give you more detailed information on these items.

## Lost and Found

Auxiliary Services is the central Lost and Found for the campus. If you have lost something please stop by our office located in the Occhiato University Center, Room 102 or contact us at (719) 549-2149.

## Parking Decals

All students needing to park a vehicle on campus are required to purchase an annual parking decal for their vehicle or motorcycle. Students are encouraged to purchase their parking decals at the beginning of each academic year (August) since parking rules are enforced by the Pueblo County Sheriff's Office located on the CSUPueblo Campus. Decals can be purchased in the Auxiliary Services Office and the Cashier's window throughout the year. Students living in University Village at Walking Stick, Belmont Hall, Crestone Hall, Culebra Hall, and Greenhorn Hall will be provided special resident permits at reduced rates to park; however, they may not park at any other location on campus without purchasing the regular general permit to park in other lots. Students living at University Village at Walking Stick must obtain the special sticker from the apartment complex office.

## STUDENT ACADEMIC SERVICES

## Academic Improvement Program

The Academic Improvement Program helps students on academic probation develop an individualized plan for improving their academic standing. Contact us in LARC 267 or call (719) 549-2581.

## Disability Resource Office

The Disability Resource Office assists in providing accommodations and services to students with documented disabilities. Students with documented disabilities should contact us in LARC 169 or call (719) 549-2648.

## Undeclared Academic Advising for Continuing and New Transfer Students

The SAS Academic Advisor works with new transfer and continuing students who are undeclared, students changing their major, and undeclared students interested in exploring majors and learning how majors connect to
careers. The advisor also assists students with course selection and registration. Undeclared advising is located in LARC 267. To schedule an appointment call (719) 5492581.

## Gen Ed Tutoring Center

The Gen Ed Tutoring Center provides individual and group tutoring for general education courses as well as ENG 099, ENG 111, RDG 099, MATH 098, and MATH 099. For more information visit us in LARC 251 or call us at (719) 549-2901.

## Writing Room

The Writing Room provides an inviting atmosphere where students can receive advice and positive feedback on any type of writing from research papers, letters, and writing assignments to poetry and fiction. Visit us in LARC 251, online at http://www.colostate-pueblo.edu/owl, or call us to make an appointment at (719) 549-2901.

## THE UNIVERSITY LIBRARY

The University Library supports teaching and learning by providing information services to students, faculty, staff and patrons throughout the city and region.

Library faculty and staff assist patrons in learning how to find and utilize print and electronic books and journals, internet sources, audiovisual materials, and government documents through instruction for individuals, small groups or formal classes. Staff also prepares subject guides for classes and arranges interlibrary loans. Librarians are available by phone, email, text message, or in person to answer questions.

Approximately 300,000 volumes are available, as well as access to over 100,000 periodical titles. The library's website provides access to over 100 online databases with reference information and journal articles, as well as web-based tutorials and help guides.

The University Library is a designated selective depository for U.S. Government documents. Special collections include the University Archives; the Colorado Chicano Movement Archives; the Ruben Archuleta Collection; papers of Vincent Massari, former state senator; the Alva Adams family papers; Tobie Hopkins Black Literature; the Ralph Taylor Southwest collection, and the Edward O'Brien Western collection.

The library recently underwent a complete remodel and expansion. The new Library and Academic Resources Center (LARC) opened in the spring 2011. The LARC includes technology study rooms and open computer labs that provide access to 100 desktop computers as well as laptops and iPads.

## VEHICLE PARKING PERMITS

Students who park their vehicles on campus must display a valid permit. Permits may be obtained at the Cashier's window or Auxiliary Services (OUC Room 102). Each student should purchase either a resident or general student permit, depending on his/her housing situation. Students may be eligible to charge a permit to their student accounts prior to financial aid disbursement. Student permits expire on August 31st every year.

## GRADUATE POLICIES AND PROCEDURES

## GRADUATE ADMINISTRATION

Graduate programs and curricula at Colorado State University-Pueblo are developed by the faculty and administration in the instructional colleges, centers and schools and are administered with the assistance of the Dean of Graduate Studies and Research and the VicePresident of Student Services and Enrollment Management. Academic policies affecting graduate programs and courses are reviewed by the University Graduate Studies Board and governed by the Faculty Senate. Each graduate program has a director or coordinator functioning as the person to contact for specific information.

## GRADUATE DEGREE PROGRAMS

Colorado State University-Pueblo offers selected graduate courses and programs for degree-seeking and non-degree students. Graduate degrees are offered in Biology (MS), Biochemistry (MS), Chemistry (MS), Engineering (MS), Industrial and Systems Engineering (MSISE), Business Administration (MBA), Education (M.Ed.), History (MA), and Nursing (MS).

## GRADUATE ADMISSIONS POLICIES AND PROCEDURES

A student who has received a baccalaureate degree from an accredited institution and who wishes to begin a graduate program must submit the following items to the Office of Admissions, Colorado State University-Pueblo, 2200 Bonforte Boulevard, Pueblo, Colorado, 81001-4901. The following items shall constitute the admission file for each applicant:

1) A completed application for admission to graduate programs of Colorado State University-Pueblo and an application fee of $\$ 35$. The fee is non-refundable and is not applicable towards tuition. An application form may be obtained by writing the CSU-Pueblo Office of Admissions, by telephoning (719) 549-2462, or online at http://www.colostate-pueblo.edu.
2) Official transcripts of all college and university work must be sent directly to the Office of Admissions by each institution attended. Records received directly from students may be used for advisement purposes only.
3) An official score from the appropriate standardized admission exam must be provided. See specific programs for required exam(s) and scores.
4) For international students whose native language is not English, a minimum score of 500 on the Test of English as a Foreign Language (TOEFL) paper-based exam, a minimum score of 173 on the TOEFL computer-based exam, a minimum score of 61 on the TOEFL internet-based (iBT) exam, a minimum score
of 80 on the Michigan Test of English Proficiency, or a minimum band score of 5.0 on the International English Language Testing System (IELTS) test is required for admission. However, a minimum score of 550 on the TOEFL paper-based exam, a minimum score of 213 on the TOEFL computer-based exam, a minimum score of 79-80 on the TOEFL internet-based (iBT) exam, or a minimum band score of 6.0 on the IELTS is required for the Master in Business Administration (MBA), and the Master of Science with a major in Nursing. Students who complete an undergraduate degree at an institution in the United States are exempt from this requirement.
5) Specific programs may have additional requirements.

## GRADUATE ADMISSION

Admission to graduate studies does not constitute admission to a particular graduate program. Admission to a particular degree program must be approved by the program director/coordinator upon review of the student's credentials.

## Regular Status

Regular status will be given to degree-seeking students who meet all of the published requirements of their selected graduate program department. The requirements include:

- A baccalaureate degree from an institution accredited by the regional accreditation agency (or equivalent). Admission to an approved joint degree (3+2) program at CSU-Pueblo does not require a baccalaureate.
- The minimum undergraduate GPA established for all programs is 3.000 .
- Submission of satisfactory scores from a standardized admissions test if required by the program department. International students whose native language is not English must also meet the English language proficiency standard set forth in the Graduate Admissions Policies and Procedures section.
- A completed admissions file.
- Any additional requirements for the selected program, including completion of leveling courses to correct undergraduate deficiencies. Programs may specify conditions which may include higher grade-point averages, required scores on entrance examinations, or undergraduate major or course requirements. Programs may also limit admissions based on capacity.


## Conditional Status

The University provides a conditional status for students who have not satisfied the minimum undergraduate grade-
point average, or the minimum required test score(s), or who have other deficiencies in their preparation.

The Vice-President of Student Services and Enrollment Management on recommendation of the program director/coordinator, will admit the student under conditional status if the student's grade-point average is at least 2.500 , but not high enough for regular admission; or if the student has not met a condition specified by the program department. Such special action may be taken if there are positive indicators of graduate success, e.g., high GRE or GMAT scores, solid upper-division academic performance, or outstanding professional achievement.

The program director/coordinator will notify the student of the specific conditions for moving to regular graduate status. Conditions of admission to regular status can include additional course work beyond the degree requirements; specified scores on standardized admissions tests; or other conditions required by the program director/coordinator. A written statement of the conditions and a plan for meeting them will be prepared by the program director/coordinator and filed with the dean of the college/school, the Dean of the Graduate Studies and Research, the Vice-President of Student Services and Enrollment Management, and a copy of the plan will be provided to the student.

If the conditions are met, the program director will notify the Vice-President of Student Services and Enrollment Management, the dean of the college/school, and the Dean of the Graduate Studies and Research and the student will be notified that he/she has achieved regular degree-seeking status. If not successful, the student will be notified by the Vice-President of Student Services and Enrollment Management that conditional status has been terminated and of his or her dismissal from the program. Students on conditional status may count toward the degree a maximum of 12 hours of graduate course work taken in the degree program.

## Non-Degree Seeking Students

A student who desires to take graduate courses for personal enrichment, for job advancement, or for transfer to another institution, may do so through either the NonDegree Status option or through the Guest (for credit) option.

## Non-Degree Status

Students seeking non-degree status must complete a full graduate admission application. Non-degree status students are limited to enrolling in a total of twelve graduate hours unless approval is given by the Dean of Graduate Studies and Research. The approval of the appropriate program director is required to enroll in graduate coursework that is part of the curriculum for a graduate program.

A maximum of twelve graduate hours of CSU-Pueblo credit earned as a non-degree seeking student may subsequently be applied toward a master's degree if approved by the degree-granting program. Individual programs may limit the number of hours applicable to the program. A student who completes twelve graduate hours as a non-degree seeking student, may not subsequently be admitted conditionally to a graduate degree program.

## Guest (For Credit) Student Status

Guest (for credit) student status is reserved for applicants who wish to enroll in courses without seeking a degree and who meet the following criteria. Applicants who wish to register as a guest (for credit) student must be Colorado residents and are required to complete a short application with the Office of Admissions each term that they wish to enroll. Guest (for credit) students are NOT REQUIRED to submit official transcripts, test scores or an application fee; however, guest (for credit) students must obtain approval from the relevant graduate program director/coordinator and the instructor. Tuition and fees are based on the number of credits for which they register and students are INELIGIBLE to receive financial aid. The maximum limit on credit taken as a graduate guest (for credit) student before they need to apply for regular admission is 12 credits.

## GRADUATE WORK TAKEN BY SENIORS

CSU-Pueblo students who are in their senior year of undergraduate work may take graduate courses for graduate credit (see information for specific programs) with the approval of the appropriate program director/coordinator.

Graduate level courses ( 500 level) cannot be used simultaneously to satisfy baccalaureate and graduate degree requirements with the exception of approved jointdegree (3+2) programs.

## CHANGE OF STATUS

The program director/coordinator will notify the VicePresident of Student Services and Enrollment Management and the Dean of Graduate Studies and Research when the student has satisfied the conditions of admission. The Vice-President of Student Services and Enrollment Management will notify the student, the program director/coordinator, and the Dean of Graduate Studies and Research when the student has satisfied the conditions of admission and is changed to regular status.

## GRADUATION REQUIREMENTS

Each graduate program at the University has specific graduation requirements, which must be met prior to graduation. In addition, students must fulfill the following requirements for a graduate degree:

1) Have a cumulative graduate GPA of 3.000 or better at graduation. A maximum of six semester hours of course work at the grade of $C+$ or $C$ may apply toward graduation. A maximum number of nine semester hours of approved transfer credit may be applied to the degree.
2) Have regular student status.
3) Complete the program's minimum number of hours of approved course work.
4) Pass a final comprehensive and/or oral examination in the major area of study, if required by the program.
5) Submit a graduation planning sheet signed by the student's graduate advisor during the semester prior to the term in which graduation is to occur. The deadline for submission is published in the Semester Notes.
6) Complete a thesis or directed research project if required by the program. If choosing the thesis option, submit five approved copies of the thesis to the Library for binding. The bound thesis will be distributed to each of the following: one to the program director/coordinator, two to the University Library, one to the committee chair, and one to the department. Reproduction and binding costs are the responsibility of the student.

NOTE: Enrollment for thesis or directed research credit is required for any academic term during which University resources (e.g., faculty time, computer use, library, etc.) are being used. However, a maximum of six (6) semester hours of thesis or directed research course work will count toward meeting graduation requirements for MS/MA degrees.

## ACCEPTANCE OF TRANSFER CREDIT

A maximum of nine semester hours of resident graduate credit from other regionally accredited graduate institutions may be applied to a graduate degree program. Transfer credit from non-United States institutions will be evaluated on a case-by-case basis. Transfer credits must be directly applicable to the degree program and must be approved by the applicant's graduate committee, the program director/coordinator and the Vice-President of Student Services and Enrollment Management. Graduate credits accepted in transfer must be from a course in which a grade of B- or better was earned. Credits accepted in transfer do not apply to the GPA at CSU-Pueblo. Credits already used for minimum degree requirements at another institution cannot be used toward fulfilling a CSU-Pueblo degree. Individual programs may set additional criteria for acceptance of transfer credit.

## GRADUATE ADVISING

Each graduate degree area has a program director/coordinator that serves as the initial graduate advisor to all graduate students in the program, unless the
dean of the college, center, or school makes a different assignment. Individual programs may require additional procedures for administering the graduate committee.

The responsibilities of the graduate advisor and the graduate committee include advisement, approval of the degree plan, approval of a thesis or directed research topic and final document (if appropriate), and administration and approval of comprehensive and/or oral examinations and thesis/project defense.

## COURSE LOADS

Graduate students enrolled in nine or more graduate credit hours are considered full-time students (six hours, summer); those enrolled for six graduate credit hours are considered half-time students (three hours, summer).

## TIME LIMITS

Courses completed six or more years before the date of graduation, either at CSU-Pueblo or at another institution, will not be accepted as satisfying graduation requirements without the written approval of the student's graduate program director/coordinator and college dean.

## DEGREE PLAN

All degree-seeking graduate students are required to submit a degree plan, approved by all members of the graduate committee (if applicable) and the program director/coordinator, to the Records Office. The degree plan should be submitted no later than upon completion of 12 hours of study. A course taken, prior to having any given degree plan approved, is subject to review for suitability in the program. Changes in the degree plan must be approved by the graduate advisor and the program director/coordinator and submitted to the Dean of Graduate Studies and Research and Records Office.

## UNDERGRADUATE COURSES

Only graduate courses ( 500 level or above) will count toward a graduate degree. However, students admitted to graduate study may be required to complete some undergraduate prerequisite or leveling courses in addition to their graduate work.

Courses taken for undergraduate credit by a graduate student (courses 400 level or below) do not enter into the graduate grade-point computation. A graduate program director/coordinator may, however, stipulate a grade point to be achieved in such undergraduate courses.

Graduate programs may include courses which are dually numbered at the undergraduate (400) and graduate (500) level. Students registered for graduate credit are required to perform at the graduate level. Dual-listed courses taken
for undergraduate credit will not apply toward a graduate program. Graduate students may not repeat for graduate credit a dual-listed course which was taken in the undergraduate program.

## DUAL DEGREE CREDIT

Up to six semester hours of elective credit may be applied to more than one graduate degree program if the degrees are pursued concurrently pending approval of the graduate committees of the programs involved, the program director/coordinators, the Vice-President of Student Services and Enrollment Management, and the Dean of Graduate Studies.

## ACADEMIC STANDARDS

Graduate courses are graded in an alphabetical system with the following interpretation:

```
A - 4.00 - Excellent
A- - 3.67
B+ - 3.33
B - 3.00 - Good performance
B- - 2.67
C+ - 2.33
C - 2.00 - Passing, but below expected performance
D+ - }1.3
D - 1.00 - Unsatisfactory performance
D- - 0.67
F - 0.00 - Failing
IN - Incomplete
S - Satisfactory
IP - In progress
U - Unsatisfactory
W - Withdrawal
WN - Withdrawal for nonpayment
NC - No credit
```

Students may apply no more than six semester hours of work with a grade of $C$ toward graduation requirements. Only grades of A-C, and S fulfill graduation requirements for graduate programs. Graduate students may repeat a maximum of six semester hours of graduate credit. When a course is repeated, both the subsequent grade and the original grade are included in the graduate grade point average.

## ACADEMIC STANDING

The cumulative graduate GPA will be determined from all coursework attempted at the 500 level or above. To remain in good academic standing, a student's graduate GPA must remain at 3.000 or better. If the graduate GPA falls below 3.000, a graduate student will be placed on probation. Students have one semester to show progress toward good standing as measured by increasing the graduate GPA from the previous semester. Probationary
students will be dismissed whenever progress toward good standing is not achieved; after a probationary student has accrued 15 credits; or whenever the graduate GPA falls below 2.500. A student may take up to six hours beyond the program requirements (including repeated credits) to improve the cumulative graduate GPA to the required minimum of 3.000 at time of graduation.

In addition, students must maintain a cumulative GPA of 3.000 or better in all courses attempted after achieving graduate status. If a student is in the degree plus program or admitted conditionally, all required leveling courses must be completed at a minimum GPA of 3.000. Graduate program directors/coordinators will notify the VicePresident of Student Services and Enrollment Management, and the Dean of Graduate Studies and Research, if an when there is a change in academic standing for a graduate student based upon required leveling courses for a conditionally admitted student.

A student may appeal dismissal by submitting a written petition to his/her program director/coordinator. This petition must provide a justification for continued registration. The program director/coordinator will forward a recommendation through the appropriate college dean, the Dean of Graduate Studies and Research, and the Office of the Provost. The Provost or his/her designee will make a final decision on the appeal and inform the student of that decision. Decisions by the Provost are final.

## COMPREHENSIVE EXAMINATIONS

Graduate programs may require a final comprehensive and/or oral examination. Scheduling is made through the graduate advisor. Students who fail a final examination may retake the examination once. A re-examination cannot be scheduled in the same term as the original examination.

## NON-THESIS OPTIONS

Some graduate programs offer non-thesis options to students. Details of the requirements are specified in the respective section of this catalog. Students also should consult with the appropriate program director/coordinator for the requirements.

## THESIS

Some graduate programs provide an option that includes a thesis and an oral defense of the thesis. Students must submit a research plan prior to the work. The plan must define the topic of study and outline the research design. The plan must have the written approval of all members of the student's graduate committee, the program director/coordinator, and the appropriate dean.

The student's advisor will assist in selecting a graduate committee. The graduate committee shall consist of at least three faculty members and is appointed by the dean of the college, or school in consultation with the student, the advisor, and the program director/coordinator. One member of the committee may be from outside the department of the student's graduate program. Changes in membership in the graduate committee may be requested in writing by the student to the dean and the program director/coordinator.

The research plan should be filed as soon as possible after the degree plan is filed and before 18 credit hours of the student's degree plan have been completed.

## THESIS INSTRUCTIONS

Students writing a thesis in partial fulfillment of graduation requirements must submit five official copies of the approved thesis to the University Library for binding. The student will pay the Library for the binding cost (based upon the fee schedule maintained by the Library) of the 5 required copies plus any additional copy bindings requested by the student. The bound thesis will be distributed to each of the following: one to the program director/coordinator, two to the University Library, one to the committee chair, and one to the department.

## The Thesis Must:

1) Contain a title page;
2) Contain a certificate of acceptance;
3) Conform to the style and form approved by the major department and outlined in the thesis plan;
4) Be printed on high-quality paper with a minimum of 25 percent rag content; and
5) Be bound.

The required University copies of the thesis must be of high-quality printing and must use a paper of the same quality as the original and include color pages wherever appropriate. Other copies of the thesis may be duplicated in any manner the student desires.

It is imperative that the utmost care be taken in the preparation of the final copy of the thesis. The completion of the thesis, including preparation and duplication, is the sole responsibility of the student.

The thesis abstract should consist of no more than five hundred (500) words. The thesis abstract should cover the following items:

1) Purpose of study;
2) Research materials and methods results; and
3) Summary and conclusions.

For additional thesis or directed research requirements, consult your program advisor.

## ORAL DEFENSE OF RESEARCH

Upon completion of a master's thesis, an oral defense/final comprehensive examination must be scheduled. Application for the oral defense is made to the graduate advisor.

A report of the outcome of the oral defense must be filed with the Dean of Graduate Studies and Research. The report must be signed by all members of the student's graduate committee. Students must pass the oral defense to complete their thesis or directed research requirement successfully.

## APPEALS

All graduate policies, procedures, and regulations may be appealed. Appeals must be made in writing first to the appropriate graduate director/coordinator, followed by the Dean of Graduate Studies and Research, and finally to the Office of the Provost. The academic grade appeals process is the same as is described in the undergraduate section on appeals. See Grade Change Policy/Academic Appeals listed in the Academic Policies section of this catalog.

## PROGRAMS OF STUDY

## Graduate Programs in Natural Sciences

The College of Science and Mathematics offers Master of Science degrees in three disciplines within the Natural Sciences: Biology MS, Chemistry MS, and Biochemistry MS. Students completing any of these degrees will develop advanced skills in the general discipline of choice and will apply these skills in the completion of a thesis research project or internship. GRE scores of at least 300 (verbal and quantitative) based on the current GRE exam are required for regular admission to GPNS programs.

## BIOLOGY (MS)

## Program Director: Dr. Brian Vanden Heuvel

The graduate program leading to the degree of Master of Science in Biology prepares students to apply basic scientific principles to the practical biological problems encountered in business, industry, government, and education. Graduates from the program will be able to apply the techniques of scientific research to real-world biological problems. Course work may include several important areas relevant to biology, including biotechnology, bio-fuels, statistics, environmental, molecular, and cellular biology. A unique feature of the program is its $3+2$ plan which is described elsewhere in this catalog. The $3+2$ plan allows a student to
simultaneously receive a BS and an MS degree in five years. The Master of Science in Biology requires 30 or 32 semester credit hours of approved graduate course work for, respectively, the thesis (30) or the non-thesis option (32).

## Expected Student Learning Outcomes

Upon completion of the MS in Biology, students will have achieved the following goals:

- Mastery of the Scientific Method - Independent development and mastery of problem solving skills including experimental design, execution, critical analysis, and interpretation of the results of original scientific experimentation (thesis) or experiential learning (internship).
- Dissemination of Scientific Products - Persuasive communication and defense of significant results of original scientific investigation presented in both written and oral format at a graduate peerprofessional level.
- Utilization of the Literature - Critical evaluation of an independently accessed comprehensive body of scientific literature which is project relevant and foundational in supporting and explaining research findings in both written and oral format.
- Development of a Relevant Knowledge Base Development of intrinsically held fundamental fieldspecific knowledge which will be applied to explain and defend research findings at a level of mastery expected by peer-professionals.
- Professionalism and Self Responsibility - Maintain a consistent professional work ethic of independently taking the initiative and motivation to produce tangible products of a quality commensurate with peerstandards in graduate or professional schools or in the career field being pursued.


## Outcomes Assessment Activities

The faculty of the GPNS will use a variety of methods for evaluating student learning outcomes. Students completing this degree program will give a public research seminar (BIOL 593) that will be evaluated by cognizant GPNS faculty members. A research thesis or internship project will be designed, conducted, and publically presented in writing and orally prior to defense and evaluation by the student's Graduate Advisory Committee.

## Degree Requirements

The course of study requires eight semester credits of work common to all students. Additionally, each student must select an emphasis area with a core of three to four semester credits. Twelve to seventeen credits in elective courses are also required, depending on which option is chosen. The thesis option requires successful completion
of six semester credits of thesis research (BIOL 599) and an approved thesis. The non-thesis option requires successful completion of four semester credits of Internship Seminar. The program of study for each student must be approved by a graduate committee and the Program Director. Thesis option students are required to defend their research results before a thesis defense committee. A non-thesis option student must complete a comprehensive exam, submit a formal written report based on an internship, and defend their internship work before their graduate committee. Program requirements are summarized as follows:

|  |  | Plan A (thesis option) | Plan B <br> (non-thesis option) |
| :---: | :---: | :---: | :---: |
| BIOL | 510 | 3 | 3 |
| MATH | 550 | 3 | 3 |
| BIOL | 598 |  | 4 |
|  | OR |  |  |
| BIOL | 599 | 6 |  |
| BIOL | 593 | 1 | 1 |
| BIOL | 588 |  | 1 |
|  | OR |  |  |
| BIOL | 589 | 1 |  |
| Core Courses (1 of 4 required) |  |  |  |
| BIOL | 540/L | 3 or 4 | 3 or 4 |
|  | OR |  |  |
| BIOL | 543/L |  |  |
|  | OR |  |  |
| BIOL | 552/L |  |  |
|  | OR |  |  |
| BIOL | 553/L |  |  |
| Elective | Courses | 12-13 | 16-17 |
| TOTAL |  | 30 min . | 32 min . |

Specific course numbers, course titles, and credit hours for all core requirements, emphasis core requirements, and electives are cited as follows:

## Required General Courses

| Courses |  | Titles | Credits |
| :--- | ---: | :--- | :--- |
| BIOL | 510 | Foundations in Graduate Studies ......... 3 |  |
| BIOL | 593 | Seminar ............................................. 1 |  |
| MATH | 550 | Statistical Methods ........................ 3 |  |
| BIOL | 588 | Internship Seminar .......................... 1 |  |
|  |  | OR |  |
| BIOL | 589 | Thesis Defense...................................... 1 |  |

## Required Biological Sciences Core Courses

Students will take one of the following courses:

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| BIOL | 540/L | Molecular Genetics/Lab | 3 |
| BIOL | 543/L | Limnology/Lab |  |
| BIOL | 552/L | Advanced Microscopy/La | 4 |
| BIOL | 553/L | Ecology/Ecology Field |  |

## TOTAL 3-4

Elective courses are selected from courses listed below: (others may be added, with permission as new courses are added, or from other areas of study, for example biochemistry).

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| BIOL | 502 | Immunology ..................................... 3 |
| BIOL | 503 | Virology........................................... 2 |
| BIOL | 512/L | Cellular Biology/Lab........................... 4 |
| BIOL | 513/L | Plant Physiology/Lab ......................... 4 |
| BIOL | 521/L | Histology/Lab ................................... 4 |
| BIOL | 532/L | Developmental Biology/Lab ................ 4 |
| BIOL | 540/L | Molecular Genetics/Lab ...................... 3 |
| BIOL | 541/L | Freshwater Invertebrate Zoology/Lab ... 4 |
| BIOL | 543/L | Limnology/Lab ................................. 4 |
| BIOL | 550/L | Survey of Genomics and |
|  |  | Bioinformatics/Lab ............................ 3 |
| BIOL | 552/L | Advanced Microscopy/Lab.................. 4 |
| BIOL | 553/L | Ecology/Ecology Field Studies ............ 4 |
| BIOL | 561 | Applied Geospatial Technology <br> (GIS/GPS) $\qquad$ |
| BIOL | 562 | Environmental Management............... 3 |
| BIOL | 565 | Environmental Toxicology.................. 3 |
| BIOL | 579/L | Ichthyology/Lab................................. 3 |
| BIOL | 581/L | Entomology/Lab................................ 3 |
| BIOL | 583/L | Mammalogy/Lab .............................. 3 |
| BIOL | 585/L | Plant Taxonomy/Lab......................... 4 |
| BIOL | 591 | Special Topics ...............................1-4 |
| BIOL | 595 | Independent Study.........................1-4 |

## BIOLOGY 3+2 PLAN (BS/MS)

One feature of the Biology MS program is the $3+2$ plan, which is designed to give the opportunity to qualified advanced-level undergraduate students to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on an individual student's abilities and motivation.

Specific requirements for the $3+2$ program are included in the Biology MS description of the College of Science and Mathematics, undergraduate programs section of this catalog.

## CHEMISTRY (MS)

## Program Director: Dr. Richard Farrer

The graduate program leading to the degree of Master of Science in Chemistry prepares students to apply fundamental chemistry principles to more advanced questions encountered in industry, government, business, and education. Graduates from this program will be able to apply techniques of scientific research in the chemical sciences to real-world problems.

Course work may include several important areas in the chemical and natural sciences, including advanced instrumental techniques, and environmental concerns. This program also offers a $3+2$ plan described elsewhere, which allows students to simultaneously complete requirements for a $B S$ and MS degree in five years.

The Master of Science in Chemistry requires 30 or 32 semester credit hours of approved graduate course work in either the thesis or non-thesis (internship) option, respectively.

## Expected Student Learning Outcomes

Upon completion of the Chemistry MS or BS/MS as part of the Graduate Programs in Natural Sciences (GPNS), students will:

- Be able to understand and evaluate the scientific literature and use it in their courses and their research.
- Be able to effectively communicate scientific research, both their own and information from the research literature, in written and oral fashions.
- Develop and master the scientific problem solving skills required to define and solve basic or applied original scientific questions using the scientific method.
- Actively engage in research/internships and discourse with the faculty in the Chemistry Department and other STEM disciplines.
- Disseminate, in collaboration with faculty, the products of the Chemistry-MS program within the CSU-Pueblo community and with communities outside of the University in activities using their professional expertise.


## Outcomes Assessment Activities

The faculty will use a variety of methods for evaluating student learning outcomes. These include required student enrollment in CHEM 510 (Foundations in Graduate Studies), which involves faculty directed instruction and practice in searching, evaluating, and discussing scientific literature, instruction in experimental
design, and dissemination of scientific research results. Students completing this degree program will give a public research seminar (CHEM 593) that will be evaluated by cognizant GPNS faculty members. A written research thesis or internship report will be publically presented and defended by students to demonstrate proficiency in their area of study and these will be evaluated by the student's Graduate Advisory Committee. Students will collaborate with faculty to present the results of their thesis research or internship project within the greater Southern Colorado region, give seminars/posters on campus or at appropriate scientific meetings, publish the results of their research in peer reviewed scientific journals, or disseminate information through other appropriate mediums.

## Degree Requirements

The course of study requires five semester credits of course work common to all students. Each student must complete three of the five core courses ( 9 semester credits). Students are required to complete 10-12 additional credit hours of approved graduate level electives in Chemistry, Biology, Math, or Engineering as outlined in the graduation plan developed with the student's advisor and graduate committee, and approved by the Program Director. The signed graduation plan may be completed at any time, but is a requirement for successful completion of CHEM 510.

Thesis option students are required to defend their research results before their graduate committee. Nonthesis option students must take a written comprehensive examination over courses taken in their program of study. A non-thesis option student must submit a formal written report based on an internship and defend their internship and work before their graduate committee.

Each student must pass qualifying exams in three of five areas of selected chemistry content (analytical, biological, inorganic, organic, or physical chemistry). Students will have two opportunities to pass each area exam. Qualifier examinations are scheduled during the week preceding the beginning of classes each term or in consultation with the program director or department chair. If an examination is failed, the requirement may be satisfied by completing the designated undergraduate coursework in the appropriate subdiscipline, as specified by the program director or department chair, with a minimum grade of " B ". Students enrolling into the $3+2$ program will be exempt from the requirement to pass qualifying exams if they have completed courses at CSU-Pueblo in analytical, biological, inorganic, organic, or physical chemistry with a grade of " $B$ " or better. Students enrolled in the $3+2$ program required to pass qualifying exams will schedule the exams in consultation with the Program Director.

Chemistry program requirements are summarized as follows:

| Plan A | Plan B |
| :---: | :---: |
| (thesis option) | (non-thesis option) |


| CHEM | 510 | 3 | 3 |
| :--- | :--- | :--- | :--- |
| CHEM | 588 |  | 1 |
| CHEM | 589 | 1 | 1 |
| CHEM | 593 | 1 | 4 |
| CHEM | 598 | $6^{*}$ |  |


| Core Courses (3 of 5 required -9 credits) |  |  |
| :--- | :---: | :---: |
| CHEM | 501 | 3 |
| CHEM | 511 | 3 |
|  | OR |  |
| CHEM | 512 | 3 |
| CHEM | 521 | 3 |
| CHEM | 529 | 3 |
| CHEM | 531 | 3 |
|  |  | 3 |
| Elective Courses | 10 | 3 |
| TOTAL | 30 | 3 |

[^1]Elective courses may be selected from the following chemistry courses or others may be added with permission of the graduate committee.

| Course |  | Titles Credits |
| :---: | :---: | :---: |
| CHEM | 501/L | Advanced Organic Chemistry/Lab ....... 4 |
| CHEM | 503 | Polymer Chemistry ........................... 3 |
| CHEM | 511 | Biochemistry I.................................. 3 |
| CHEM | 512/L | Biochemistry II/Lab ............................ 5 |
| CHEM | 519/L | Instrumental Analysis/Lab .................. 5 |
| CHEM | 521 | Advanced Inorganic Chemistry............ 3 |
| CHEM | 525 | Environmental Chemistry ................... 3 |
| CHEM | 529 | Advanced Analytical Chemistry ........... 3 |
| CHEM | 531 | Advanced Physical Chemistry ............. 3 |
| CHEM | 550 | Industrial Chemistry ........................... 2 |
| CHEM | 591 | Special Topics ...............................1-4 |
| CHEM | 592 | Research ......................................1-3 |
| CHEM | 595 | Independent Study .........................1-4 |

## CHEMISTRY 3+2 PLAN (BS/MS)

One unique feature of the Chemistry MS program is the $3+2$ plan, which is designed to give the opportunity to qualified advanced-level undergraduate students to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on an individual student's abilities and motivation. Students are encouraged to enter
the program as early as the fall of the junior year but not later than the fall of the senior year.

Specific requirements for the $3+2$ program are included in the Chemistry MS description of the College of Science and Mathematics, undergraduate programs section of this catalog. Students must meet the requirements of both degrees.

## BIOCHEMISTRY (MS)

## Program Director: Dr. Richard Farrer

The graduate degree program outlined leads to the degree of Master of Science in Biochemistry. The degree program prepares graduates for professional employment or for further advanced studies at the interface of chemistry and biology, and in molecular biosciences, including biochemistry and biotechnology.

Course work for this degree option includes several important classes at the intersection of the biological and chemical sciences, including advanced topics in cellular biology, biochemistry, and laboratory techniques. This program also offers a $3+2$ plan, described elsewhere, which allows students to simultaneously complete requirements for a $B S$ and $M S$ degree in five years.

The Master of Science in Biochemistry requires 30 semester credit hours of approved graduate course work in the thesis option.

## Expected Student Learning Outcomes

Upon completion of the Biochemistry MS or BS/MS as part of the Graduate Programs in Natural Sciences (GPNS), students will:

- Be able to understand and evaluate the scientific literature and use it in their courses and their research.
- Be able to effectively communicate scientific research, both their own and information from the research literature, in written and oral fashions.
- Develop and master the scientific problem solving skills required to define and solve basic or applied original scientific questions using the scientific method.
- Actively engage in research/internships and discourse with the faculty in the Chemistry Department and other STEM disciplines.
- Disseminate, in collaboration with faculty, the products of the Biochemistry-MS program within the CSU-Pueblo community and with communities outside of the University in activities using their professional expertise.


## Outcomes Assessment Activities

The faculty will use a variety of methods for evaluating student learning outcomes. These include required student enrollment in CHEM 510 (Foundations in Graduate Studies), which involves faculty directed instruction and practice in searching, evaluating, and discussing scientific literature, instruction in experimental design, and dissemination of scientific research results. Students completing this degree program will give a public research seminar (CHEM 593) that will be evaluated by cognizant GPNS faculty members. A written research thesis will be publically presented and defended by students to demonstrate proficiency in their area of study and this will be evaluated by the student's Graduate Advisory Committee. Students will collaborate with faculty to present the results of their thesis research within the greater Southern Colorado region, give seminars/posters on campus or at appropriate scientific meetings, publish the results of their research in peer reviewed scientific journals, or disseminate information through other appropriate mediums.

## Degree Requirements

The course of study requires 5 semester credits of course work common to all students, and 6 credits of thesis research. Each student must complete 4 core courses (13 semester credits). Students are required to complete 6 additional credit hours of approved graduate level electives in Biology, Chemistry, Math, or Engineering as outlined in the graduation plan developed with the student's advisor and graduate committee and approved by the program director. The signed graduation plan may be completed at any time, but is a requirement for successful completion of CHEM 510. Students are required to defend their research results before their graduate committee.

Each student must pass a total of three qualifying exams one each in biochemistry and biology (molecular and cellular biology) and one of four other areas of selected chemistry content (analytical, inorganic, organic, or physical chemistry). Qualifier examinations are scheduled during the week preceding the beginning of classes each term or in consultation with the program director or department chair. If an examination is failed, the requirement may be satisfied by completing the designated undergraduate coursework in the appropriate subdiscipline, as specified by the program director or department chair, with a minimum grade of "B". Students enrolling into the $3+2$ program will be exempt from the requirement to pass qualifying exams if they have completed courses at CSU-Pueblo in analytical, inorganic, organic, or physical chemistry; as well as cellular biology and molecular biology with a grade of " B " or better. Students enrolled in the $3+2$ program required to pass qualifying exams will schedule the exams in consultation with the Program Director.

Biochemistry program requirements are summarized as follows:

| (thesis option o |  |  |
| :---: | :---: | :---: |
| CHEM | 510 | 3 |
| CHEM | 589 | 1 |
| CHEM | 593 | 1 |
| CHEM | 599 | 6* |
| Core Courses (4 required - 13 credits) |  |  |
| CHEM | 512** | 3 |
| BIOL | 512** | 3 |
| BIOL | 540/L | 4 |
| CHEM | 531 | 3 |
| Elective Courses |  |  |
| TOTAL |  | 30 |

* Students may enroll for a total of 6 credit hours of CHEM 599, Thesis Research.
** Labs are not required.
Elective courses may be selected from the following courses or others may be added with permission of the graduate committee.

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| BIOL | 502 | Immunology ....................................... 3 |
| BIOL | 503 | Virology.......................................... 3 |

## BIOCHEMISTRY 3+2 PLAN (BS/MS)

One unique feature of our Biochemistry MS program is the $3+2$ plan, which is designed to give the opportunity to qualified advanced-level undergraduate students to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on individual student's abilities and motivation.

Specific requirements for the $3+2$ program are included in the Biochemistry MS description of the College of Science and Mathematics, undergraduate programs section of this
catalog. Students are encouraged to enter the program as early as the fall of the junior year but not later than the fall of the senior year.

## MASTER OF BUSINESS ADMINISTRATION (MBA)

Program Director: Lia Sissom
The goal of the MBA program is to prepare students for high-level general management careers in business and other organizations. Students acquire an understanding of management theory and application, the economic, political and social environment in which businesses function, and behavioral skills that are essential in the manager's role in the implementation of business decisions. The MBA program strives to provide an environment conducive to the development of each student's ability to think in a creative and effective manner. The program makes extensive use of lectures, seminars, group projects, and case studies that are designed to demonstrate the integrative, interdisciplinary nature of business decisions.

The program is open to all applicants with a bachelor's degree, regardless of the undergraduate field of study. Students without prior business course work will be required to take leveling courses in financial accounting, business statistics, microeconomics, finance, management, and marketing. Additionally, a review of GMAT writing sub score will be used to determine if there is a need for developmental work. Students who earn less than a "C" in any leveling course will be dismissed from the program. Generally, graduate students are required to complete all leveling course requirements before enrolling in the first 500-level courses. In some instances, a student will be permitted to enroll in 500 -level courses while completing the final leveling courses.

All MBA students are required to take the Graduate Management Admissions Test (GMAT). An admission formula of 200 times the undergraduate GPA (4.000 system) plus the GMAT score will constitute a scaled admission score for each applicant. Students will be required to have at least a 1000 score on the admission formula and at least 400 on the GMAT examination. Students will not be allowed to enroll in more than six hours of graduate-level course work without being fully admitted to the program.

## Learning Outcomes Assessment

The Hasan School of Business is committed to continuous improvement through a rigorous assessment program focused on measuring learning outcomes and implementing measures to enhance students' chances of
success. Within each individual course, faculty members utilize a variety of assessment techniques including student presentations, projects, peer evaluations, examinations, and student surveys.

## Learning Goals for the MBA Program

The Hasan School of Business faculty works diligently to provide graduates with a high-quality education that prepares them for advancement in business. Our program prepares students through achievement of four primary learning goals.

1) Expression of Thoughts and Ideas

- Our graduate students will be able to communicate effectively.

2) Decision Making and Problem Solving

- Our graduate students will be able to analyze problems, identify relevant issues, and craft solutions.

3) Decision Making in a Global Business Environment

- Our graduate students will be able to develop solutions for global business issues.

4) Ethical Analysis

- Our graduate students will be able to evaluate ethical situations and offer appropriate recommendations.


## Assurance of Learning

The use of direct measures of student performance in the Hasan School of Business provides a relevant set of performance data. Reviewed by faculty, discipline groups, the School's Assurance of Learning Committee, and administrators, results of these measures are used to make program improvements. In addition to course grades, direct measures of student performance in the Hasan School of Business include:

- The Educational Testing Service (ETS) Major Field Test in Business. This test, administered nationwide, assesses what students have learned primarily in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally.
- Course-Embedded Measures. Exams, papers, presentations, and projects are course-embedded measures that can be used to assess student performance related to our MBA learning goals.

The Hasan School of Business compiles information to assess the success of MBA graduates. Information is obtained from the CSU-Pueblo Alumni Office, the Career Center, and other sources.

## MBA Standards

A student who earns two "C" grades in graduate-level courses is placed on probation. If a third "C" or lower grade is earned, the student is automatically dismissed from the program.

The MBA degree will be conferred upon students who successfully complete a minimum of 36 hours of approved course work with a minimum GPA of 3.000 . The curriculum includes the following 30 credits which are taken by all MBA students.

## MBA CORE



In addition to the MBA core, each student must complete one of the following options.

## Requirements for Option I

Approved Electives

## Requirements for Option II

$\begin{array}{ll}\text { Select Two: } & \begin{array}{l}\text { CIS 550, 560, 561, 562, 581, } \\ 582, ~ o r ~ 591 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \\ 6\end{array}\end{array}$
TOTAL PROGRAM REQUIREMENT. 36

All graduate courses for the MBA are listed in the appropriate department sections of accounting (ACCTG), business administration (BUSAD), computer information systems (CIS), economics (ECON), finance (FIN), management (MGMT), and marketing (MKTG).

## JOINT BSBA/MBA AND BS-CIS/MBA PROGRAMS

Specific requirements for the joint BSBA/MBA and the BSCIS/MBA plans are included in the Hasan School of Business undergraduate programs section of this catalog.

## MASTER OF EDUCATION (M.Ed.)

Associate Dean: Dr. Victoria Marquesen

Educational researchers and policy makers agree on the fundamental requirements for successful teachers: knowledge of subjects they teach, knowledge of both general and subject-matter specific methods for instruction and assessment; knowledge of student development; and the ability to apply this knowledge with students from diverse backgrounds. The M.Ed. at CSU-Pueblo is planned to impact the quality of teaching and learning in $\mathrm{K}-12$ classrooms by preparing master teachers with expertise in their content disciplines, in the pedagogy of teaching and learning, and in the process of continual professional development and growth. To ensure graduates' application of new knowledge and skills, CSUPueblo's program requires application of new knowledge and skills throughout the program and utilizes an assessment model that monitors teacher performance and provides information for ongoing program improvement.

One promising approach that has resulted in significant improvements in teaching practices is the National Board for Professional Teaching Standards (NBPTS) process for National Board Certification. The NBPTS has developed standards for effective teaching in specific subject areas and assessments geared to measure performance against the standards, as well as a process for teachers to demonstrate their performance on these standards. In addition to strengthening classroom teaching, teachers' involvement with the NBPTS program has improved student engagement, motivation, and achievement, including positive impact in low-performing schools.

The Master of Education degree is built on research on teacher change and is designed to prepare teachers to lead school reform, requiring completion of an emphasis area of their choice; of a core of pedagogy courses focusing on literacy, instructional technology, and differentiation of instruction; and of a core of courses focusing on professional growth. The National Board standards and certification process form the heart of the M.Ed. core and assessment process. A unique characteristic of the degree is the collaboration of faculty in teacher education and in content disciplines at the University in the design and implementation of the program.

## Relationship to the Mission of Teacher Education

The Teacher Education Program has a primary mission to prepare teachers of quality and distinction through K-16 collaborations. One of the central goals of the program is its commitment to serve the region and state of Colorado through partnerships with school districts and institutions of higher education. An integral aspect of this goal is Teacher Education's formal partnership with school districts in southern and southeastern Colorado. The joint
efforts of students, faculty, and administrators across all K16 partners focus on improving the quality of learning in classrooms in elementary, secondary, and higher education. The Master of Education degree supports this mission, strengthening K-12 teachers' abilities to provide educational opportunities for their students. At Colorado State University-Pueblo, preparing teachers is a campuswide responsibility, with faculty and administrators involved in support of the program's mission.

## Graduate Program Goals and Student Outcomes

As teachers proceed through the program, they will be asked to apply and demonstrate their growth in learning and teaching related to the following goals and outcomes.

## Content Knowledge Goal: Master teachers utilize content knowledge to raise the achievement of PK-12 learners.

1) Demonstrate growth in content knowledge related to teaching assignment and the application of content knowledge to classroom instruction and assessment.

## Pedagogy Goal: Master teachers utilize best practices in instruction and assessment to raise achievement of PK-12 learners.

1) Understand scientifically-based practices in teaching and learning, including strategies in literacy education, instructional technology, differentiation of instruction, and apply them to raise student achievement.
2) Demonstrate multiple means of assessing and evaluating student learning and use them to change teaching and learning.

Professional Development and School Reform Goal: Master teachers understand the process for professional change in their own practice and in education, including the interpretation of educational research.

1) Locate, interpret, synthesize, and apply educational research in best practices in teaching.
2) Understand models for professional change, including teacher collaboration, professional learning communities, strategies for mentoring and coaching to facilitate change, and effective professional development.
3) Demonstrate understanding of reflective practice that results in improved classroom teaching and learning, including teacher reflection, use of technology in selfassessment, collaboration for change, and selfmanagement of change.
4) Demonstrate understanding of system and organizational change in education, including models for school change and current research and trends in school change.

## Leadership and Change Agent Goal: Master teachers apply educational research, including research on school reform and professional development to raise student achievement.

1) Demonstrate responsibility for student learning at high levels.
2) Demonstrate responsibility for school reform and leadership in school change.

## Graduate Admission Policies and Procedures

## Admission

Regular status will be given to degree-seeking students who meet all of the following requirements:

- A baccalaureate degree from an institution accredited by the regional accreditation agency (or equivalent).
- A minimum 3.000 undergraduate GPA.
- Submission of satisfactory scores from a standardized exam required for teacher licensure in the content area in which the applicant holds a teaching license (e.g., English or Elementary Education). Applicants who have taught successfully for three years may submit alternative evidence of content knowledge. Applicants who have completed the GRE or MAT should submit these scores.
- A current resume.
- A completed admissions file.
- Two letters of recommendation, one from an administrator familiar with applicant's teaching.
- A teaching license.

International students whose native language is not English must also meet the English language proficiency standard set forth in the Graduate Admissions section of the CSU-Pueblo Catalog.

## Continuation

To continue in the program, students must maintain a cumulative GPA of 3.000 .

## Program Completion

All students must fulfill the following requirements for a graduate degree:

- A cumulate graduate GPA of 3.000 or better graduation. A maximum of six semester hours of course work at the grade of C+ or C may be applied toward graduation. A maximum number of nine semester hours of transfer credit may be applied to the degree.
- Regular student status.
- The program's minimum number of hours of approved course work ( 38 semester hours).
- Completion of a final portfolio review and oral examination. The portfolio project includes a directed research project.
- Submission of a graduation planning sheet signed by the student's graduate advisor during the semester prior to the term in which graduation is to occur. The deadline for submission is published in the Semester Notes, University Calendar, and CSU-Pueblo Catalog.


## M.Ed. Degree Course Requirements

The degree is designed with three components: (1) core courses in research and professional change; (2) pedagogy courses in literacy, differentiation of instruction, and technology; and (3) courses in an emphasis area chosen by the graduate student. A unique feature of the degree is its alignment with the standards of the National Board for Professional Teaching Standards and participants' opportunity to work towards national board certification as they complete the degree.

## Component 1: Core Requirements (11 hours)

Organizational change and school reform, as well as the responsibilities of professional leadership related to educational change, are emphasized in the core. The four courses in Component 1 are developmental, with the first taken within the first nine hours, the third within the last nine hours, and the final course completed as the capstone experience in the program. All courses focus on knowledge and skills related to teacher change and leadership as a change agent in the schools, Emphasis in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, admission to all Core courses requires full admission to the graduate program.

## Course Requirements

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | :--- |
| ED | 502 | Core 1: | Teacher as Change Agent............. 3 |

Component 2: Pedagogy Requirements (choose 3 hours from each category, 9 hours total)

CSU-Pueblo recognizes that master teachers demonstrate expertise in understanding and applying current best practices in each of the following areas: literacy education, instructional technology, and differentiation of instruction for all learners. All three were selected because recent
research has indicated that application of best practices in these three areas will impact the quality of student achievement in K-12 classrooms, Teachers will select courses based on their development plan, with input from their graduate advisor. Courses cannot be double counted in emphasis areas and the Pedagogy Core.

## Instructional Technology

Graduate students may select from instructional technology courses offered by the University, with approval of their faculty advisors. Sample courses include:

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ED | 520 | Educational Media and Technology |  |
| ED | 521 | Classroom Integration of Internet |  |
| ED | 523 | Teaching and Managing Technolog |  |
| ED | 527 | Productivity Tools for Classroom . | .. 1 |
| ED | 528 | Integration of Educational Software | .. 1 |
| ED | 534 | Multimedia Design |  |
| ED | 536 | Technology \& Assessment Tools | . 3 |
| ED | 591 | Special Topics.. | ....1-3 |

## Differentiation of Instruction

Graduate students may select from any differentiation courses, including the following:

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| BBE | 503 | Content Instruction for EL Learners ......... 3 |
| ED | 512 | Teaching Diverse Learners ....................... 3 |
| ED | 531 | Diverse Learners \& Technology .............. 3 |

## Literacy Education

Graduate students may select from any literacy courses, including the following:

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| BBE | 520 | Literacy for EL Learners ....... | ..... 3 |
| ED | 529 | Literacy \& Technology........... | ..... 3 |
| RDG | 535 | Content Area Literacy . | . 3 |
| RDG | 550 | Diagnosis and Remediation of Reading Problems |  |

## Component 3: Emphasis Area Requirements (18 hours

 in one area)The more deeply teachers grasp content, the more they tend to emphasize conceptual, problem solving, and inquiry aspects of their subjects. The less knowledgeable teachers are of the content they are teaching, the more they tend to emphasize facts and procedures. The purpose of Component 3 of the program is the development of teachers' content expertise related to their area of responsibility, with candidates choosing among a number of different K-12 emphasis areas. Some areas require prerequisites, and an emphasis area should be chosen with the advisement of their graduate advisor.

## M.Ed. (Art Education)

Graduate Coordinator: Victoria Hansen, Art Department

It is the philosophy of the Art Education emphasis that exceptional art educators continue to perfect their skills as practicing artists. Students completing this area should confer with their advisor in Art Education to select courses that will expand their understanding of current issues and techniques in the field of art education as well as their knowledge and skills in art processes and production.

## M.Ed. (Early Learning)

Graduate Coordinator: Victoria Marquesen, Teacher Education Department

| Courses |  | Titles | Credits |
| :--- | :---: | :--- | :--- |
| ED | 510 | Collaboration in Education ......................... 3 |  |

Additional courses with an elementary or early childhood focus may be added with approval of the graduate advisor.

## M.Ed. (Foreign Language)

Graduate Coordinator: Alegria Ribadeneira, English and Foreign Languages Department

The emphasis in Foreign Language supports teachers' growth as language teachers by expanding their proficiency in the language as well as their understanding of literature, linguistics, culture, and issues in foreign language instruction. In addition to traditional campusbase courses, the emphasis will include opportunities for foreign language immersion and foreign travel.

## M.Ed. (Health \& Physical Education)

Graduate Coordinator: Christine Rochester, Exercise Science, Health Promotion, and Recreation Department

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| EXHP 500 | Workshop (methods of various <br> physical activities).................................1-5 <br> Methods of Elementary Physical |  |
| EXHP 522 | Education.............................................. 3 |  |
| EXHP 529 | Curriculum in Physical Education............. 2 |  |



Students completing this area should confer with their advisor if they wish to select courses leading to completion of the Colorado endorsement for K-12 Instructional Technology Teachers and K-12 Instructional Technology Specialists.
M.Ed. (Linguistically Diverse)

Graduate Coordinator: Victoria Marquesen, Teacher Education Department

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| BBE | 501 | Teaching English Language Learners ....... 3 |
| BBE | 503 | Content Instruction for EL Learners .......... 3 |
| BBE | 520 | Literacy for EL Learners.......................... 3 |
| BBE | 541 | Survey of Research in Bilingual <br> Education. $\qquad$ .2 |
| BBE | 560 | ELL Assessment \& Administration ............ 3 |
| ED | 581 | Practicum \& Seminar in Education............ 3 |

Additional courses in linguistics and foreign language may be completed with the approval of the graduate advisor. Students completing this area should confer with their
advisor if they wish to select courses leading to completion of the Colorado endorsement for K-12 Linguistically Diverse Education.

## M.Ed. (Music Education)

Graduate Coordinator: Contact Music Department
The Music Education Emphasis, when all courses have been developed and approved, will consist of the following components:

## Core Knowledge areas, 12 credits

| Courses | Titles | Credits |
| :--- | :--- | ---: |
| MUS 545 | Current Issues in Music Education............. 3 |  |
| MUS 559 | Advanced Music Analysis ...................... 3 |  |
| MUS 565 | Methods of Research in Music ED............. 3 |  |

$\overline{\text { TOTAL } \quad 12}$

## Advanced Skill areas, 6 credits from the following:

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| MUS 513 | Advanced Vocal Pedagogy................ 1 |  |
| MUS 523 | Advanced Percussion Pedagogy ....... 1 |  |
| MUS 543 | Advanced Woodwind Pedagogy ........ 1 |  |
| MUS 553 | Advanced Brass Pedagogy................ 1 |  |
| MUS 533 | Advanced String Pedagogy ............. 1 |  |
| MUS* | ........................................................ |  |

*Applicable 500-level applied lessons or ensemble courses as listed in the Course Description section of this catalog.

## M.Ed. (Space Studies for Educators)

Graduate Coordinator: Victoria Marquesen, Teacher Education Department

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| ED | 574 | Early Childhood Space Exploration............ 3 |

ED 575 Lunar/Mars Exploration.............................. 3
ED 576 Rocketry: The Future of Exploration .......... 3
ED 577 Astronomy for the Classroom ..................... 3
ED 578 Long Term Space Travel ............................ 3
ED 579 Earth Systems Science............................... 3
Additional courses with a Space Studies focus may be added with approval of the graduate advisor.


Students completing this area should confer with their advisor if they wish to select courses leading to completion of the endorsement for K-12 Special Education Generalist.

## Program Assessment

The assessment plan for Colorado State University-Pueblo's M.Ed. ensures that the program 1) monitors individual student progress necessary to support success, 2) provides summative information on student proficiency on all performance-based standards, and 3) provides reliable and valid information on the program's successes and weaknesses to ensure continuous program improvement.

## The assessment design has four components:

1) Benchmarks, student outcomes and tasks aligned with the Colorado Department of Education standards for content areas leading to endorsements (Special Education, Linguistically Diverse Education, and Instructional Technology) and the National Board of Professional Teaching Standards, forming the basis for both monitoring of student success and program evaluation.
2) A series of evaluation tools that are used by faculty within courses and at program completion to assess student performance in meeting all standards.
3) A system for documenting and monitoring student progress using the student's electronic portfolio.
4) A system to identify program strengths and weaknesses resulting in continual program improvement.

Performance Standards, Program Alignment and Evaluation Criteria

A range of tasks aligned to program standards, curriculum and instructional activities throughout the program provide multiple sources of evidence to assess performance on each program standard. These tasks include a range of examples of teaching and learning, most of them authentic teaching performance, including all of the following:

- Curriculum plans: lesson plans and unit planning.
- Self evaluations and peer evaluations of teaching.
- Measures of achievement of PK-12 students: student work samples, pre-post data, and a range of assessment results.
- Standardized test scores (e.g., the PLACE exam for Special Education), as well as teacher-constructed exams and quizzes.
- Materials and artifacts from activities with parents, colleagues, and classroom teachers included in the master's portfolio.
- Evidence of ability to understand and utilize research to improve practice.
- Evidence of inquiry (e.g., action research, case studies) to change practice.
- Video case studies of teaching.
- Evidence of program and school change, including activities in coaching, mentoring, and professional learning communities.

Graduate students begin developing their M.Ed. portfolio with their first master's course. The portfolio is a webbased database system that is linked with a system for faculty to review materials and communicate their feedback to the student. Documents that demonstrate their performance on specific standards are added throughout the program.

Program Completion. During the final capstone course, students submit the portfolio for review by a group of three faculty. In addition to the portfolio materials, graduate students participate in an oral review of portfolio contents.

Program Completer Self-Evaluation. At the end of their final course, students will complete their own selfevaluation of their performance across program standards and an evaluation of the quality of the master's program.

Follow-up Assessments. One year after graduating from the program, teacher education will conduct a survey, requesting feedback from each graduate about his/her teaching and about the quality of preparation at CSUPueblo. Survey forms will be aligned with the program standards. A similar survey will be sent to each graduate's supervisor (building principal), requesting information about teaching performance.

## ENGINEERING (MS) and INDUSTRIAL AND SYSTEMS ENGINEERING (MS)

Program Director: Dr. Neb Jaksic
The Department of Engineering offers the MS in Engineering (MSE) and the MS in Industrial and Systems Engineering (MSISE).

The MS in Engineering provides advanced education in engineering, currently in two emphasis areas: mechatronics and railroad engineering. Mechatronics combines mechanical and electrical engineering with computers to create devices that make our lives better. Electrical and mechanical systems, controlled by computers, are at the core of a wide range of processes and products. Robots, the Mars Rover, a heart-lung machine, a computer controlled telescope, and a nanoscale microscope are all examples of mechatronics. Railroad engineering combines civil, mechanical, electrical, and industrial engineering for solving engineering problems in the railroad industry.

Industrial and systems engineering deals with the design and analysis of complex, human/machine systems. Industrial and systems engineers use a "big picture" or systems-oriented viewpoint to serve as management and operations analysts, focusing on the people, materials, equipment and procedures needed for the most efficient and effective systems performance. Industrial and systems engineers analyze and evaluate systems against specified performance criteria, including efficiency, quality and safety, before new systems are created or old ones are modified. Industrial and systems engineering techniques can be applied in manufacturing and service industries, health care systems, governmental agencies and non-profit organizations.

## Expected Student Learning Outcomes

Each MSE and MSISE graduate will be able to:

- Demonstrate advanced understanding of the fundamental knowledge which serves as the basis for practice in their chosen specialization.
- Apply those principles in the design and analysis of a system or process to meet specified needs.
- Communicate effectively in writing and orally.

By applying the following rules, the MSE and MSISE program is designed to ensure these additional learning outcomes:

- Each student who does not have the required prerequisites in the chosen specialization takes the necessary leveling courses.
- Every MSE or MSISE graduate must demonstrate knowledge of material in the core courses in the chosen specialization.


## Assessment Activities

The thesis is recommended to all students, but it is only required of those graduate assistants employed full (20 hours per week) or near full-time. Some students still choose to do a thesis while some others complete projects or do both. The MSE and MSISE programs are assessed
by (1) periodic review by the faculty of the quality of student theses and projects and (2) periodic review of the results of exit interviews with graduates. The department periodically reviews completed theses and the reports to assess learning and research skills of the graduates. Exit interview results are used to assess and improve the program.

## ENGINEERING (MS)

## Degree Requirement Components

The MSE program consists of three components:
Component Credit Hours
Core Component. ..... 14
Track Component ..... 9
Elective Component ..... 10
TOTAL ..... 33

When considered as a cohesive whole, these three components constitute the student's program of study, totaling at least 33 credit hours. Any course that is applied to one of these three components is said to count towards graduation.

## The Core Component

The Core Component consists of 14 credit hours in topics relevant to the emphasis area.

## Mechatronics Emphasis Core

|  | urses | Titles | Credits |
| :---: | :---: | :---: | :---: |
| EN | 507 | Virtual Reality |  |
| EN | 513 | Artificial Intelligence |  |
| EN | 560 | Advanced Controls . | 3 |
| EN | 562 | Intelligent Robotics . | . 3 |
| EN | 593 | Graduate Seminar |  |

## Railroad Engineering Emphasis Core

| Core Courses | Titles | Credits |
| :--- | :---: | :--- | ---: |
| EN | 511 | Structural Engineering ....................... 3 |
| EN | 531 | Railroad Power Systems ...................... 3 |
| EN | 551 | Fleet Management.............................. 3 |
| EN | 552 | Vehicle Dynamics ......................... 3 |
| EN | 593 | Graduate Seminar ......................... 2 |

TOTAL 14

## The Track Component

The Track Component consists of 9 credit hours of coursework selected by the student and his or her advisor to advance the professional and/or educational goals of the student. In the MSE program, individualized tracks are tailored to the needs of the student. An individualized track must consist of 9 credit hours of graduate coursework subject to the approval of the advisor and department.

In order to count towards graduation, any Special Projects, Special Topics, Graduate Projects or Independent Study course must consist of content appropriate for the track selected. The determination of an appropriate topic is at the discretion of the advisor and department.

## The Elective Component

The Elective Component consists of 10 credit hours of coursework selected from the list of courses approved as electives by the department. This list is available through the Graduate Student Handbook and the Graduate Program Director.

## Prerequisites for the MS in Engineering

(CSU-Pueblo Course Equivalents)
Note that some of the courses listed below may have prerequisites not listed here.

Problem Solving for Engineers (EN 103)
Engineering Economy (EN 343)*
Stochastic Systems Engineering (EN 365)-railroad engineering emphasis only
Calculus I and II (MATH 126 and 224)
Calculus-Based Physics I and II (PHYS 221 and 222)
Engineering mechanics (statics and dynamics) (EN 211 and 212)
Circuits (EN 231 and 231L)
Controls (EN 360)
Electromechanical devices (EN 263)
*Any material substituted for EN 343 must include the time value of money topic.

INDUSTRIAL AND SYSTEMS ENGINEERING (MS)

## Degree Requirement Components

The MSISE Program consists of three components:

## Component Credit Hours

Core Component............................................................ 15
Track Component............................................................... 9
Elective Component ......................................................... 9
TOTAL 33

## The Core Component

The Core Component consists of 15 credit hours in five fundamental industrial engineering topics. These core courses include content that is necessary for success as an industrial engineer working in industry or continuing in graduate study. The Core Component topic areas are Simulation, Operations Research, Facility Design, Operations Planning, and a seminar on conducting academic research as a graduate student.

| Core Courses | Titles | Credits |
| :--- | :---: | :--- | ---: |
| EN | 520 | Simulation Experiments ....................... 4 |
| EN | 571 | Operations Research........................... 3 |
| EN | 575 | Facilities Planning and Design............ 3 |
| EN | 577 | Operations Planning \& Control .......... 3 |
| EN | 593 | Graduate Seminar ............................. |

If the student has an undergraduate degree in industrial engineering or a related field, some or all of the core (except EN 593) may be waived; additional electives will replace the waived courses.

## The Track Component

The Track Component consists of 9 credit hours of coursework selected by the student and his or her advisor to advance the professional and/or educational goals of the student. Currently available tracks include the Industrial Engineering and Engineering Management tracks.

Alternately, any student may pursue an Individualized Track tailored to the needs of the student. An Individualized Track must consist of 9 credit hours of graduate coursework, subject to the approval of the advisor and department.

In order to count towards graduation, any Special Projects, Special Topics, Graduate Projects or Independent Study course must consist of content appropriate for the track selected. The determination of an appropriate topic is at the discretion of the advisor and department.

## The Industrial Engineering Track

## Select at least 9 hours from:

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| EN | 503 | Ergonomics........................................ 3 |
| EN | 504 | Scheduling and Sequencing.............3 |
| EN | 530 | Project Planning and Control............... 3 |
| EN | 540 | Advanced Engineering Economics ...... 3 |
| EN | 588 | Graduate Projects.............................. 3 |
| EN | 590 | Special Projects................... 1-3 VAR |
| EN | 591 | Special Topics ......................... 1-3 VAR |


| EN | 595 | Independent Study...................... 1-5 VAR |
| :--- | :--- | :--- |
| EN | 598 | Internship........................... 1-6 VAR |

## The Engineering Management Track

The Engineering Management Track consists of 9 credit hours of graduate level coursework in Accounting, Business Administration, Computer Information Systems, Economics, Finance, Management and/or Marketing. These credit hours must represent a coherent plan of study as approved by the advisor and department.

## The Elective Component

The Elective Component consists of 9 credit hours of coursework selected from the list of courses approved as electives by the department. This list is available through the Graduate Student Handbook and the Graduate Program Director.

## Prerequisites for the MS in Industrial and Systems Engineering (CSU-Pueblo Course Equivalents)

Note that some of the courses listed below may have prerequisites not listed here.

Problem Solving for Engineers (EN 103)
Engineering Economy (EN 343)*
Stochastic Systems Engineering (EN 365)
Calculus I and II (MATH 126 and 224)
Calculus-Based Physics I and II (PHYS 221 and 222)
*Any material substituted for EN 343 must include the time value of money topic.

## The Thesis Option

MS and MSISE Students choosing the Thesis Option will apply 6 credit hours of EN 599 (Thesis Research) to the Elective Component. A program of study may include more than 6 credit hours of EN 599, but no more than 6 may count towards graduation.

## Additional Program of Study Requirements for the MSE and MSISE Programs

For a student to be awarded the MSE or MSISE degree, the student's program of study must also satisfy the following requirements. Additionally, the program of study must be approved by the MSE/MSISE Program Director.

- At least 21 credit hours must be in graduate level engineering courses.
- No more than 9 credit hours of graduate coursework may be accepted as transfer credit from another institution.
- Any course taken as a prerequisite to engineering graduate study at CSU-Pueblo may not be counted
towards graduation and must be taken for credit (i.e., not audited).


## Advising

Each term, a student must meet with his or her advisor and be advised before the student can register for classes. Students are generally advised by the MSE/MSISE Program Director, unless the student is working on a thesis. Students working on a thesis are typically advised by their thesis advisors. A candidate for the MSE or MSISE degree must work with the advisor to design a program of study. The program of study must be approved by the advisor and department. This process is formalized by submitting a graduation planning sheet to the MSE/MSISE Program Director before the semester prior to graduation.

## Admission Requirements

A successful applicant will have a quantitatively based baccalaureate degree from a regionally accredited college or university. Students with non-quantitatively based baccalaureate degrees may be admitted conditionally, but additional prerequisites may be required. Admission to the MSE program or MSISE program requires prior admission to graduate study at CSU-Pueblo. Regulations governing graduate studies are contained in the Graduate Policies and Procedures Guide available from the Office of Admissions.

## Prerequisite Requirements for Admission

Prior to being admitted to regular status, a student is required to demonstrate preparation for graduate study in the chosen emphasis (for the MSE) or in industrial and systems engineering (for the MSISE). This is done either by completing prerequisite background courses at CSUPueblo, by documenting satisfactory completion of equivalent coursework elsewhere, or by demonstrating equivalent work and/or life experience.

Students who do not possess a satisfactory prerequisite background may be admitted conditionally but be required to complete prerequisites. A plan for completing prerequisite requirements in a timely fashion is developed by the student and advisor and must be approved by the MSE/MSISE Program Director.

## Graduate Assistantships

Full-time student admitted to the program with regular status are eligible to apply for merit-based, competitive graduate assistantships. Graduate assistants receive financial support from the department in the form of a stipend and/or remission of tuition and fees for one year (two semesters). A graduate assistant who is supported at a funding level equivalent to full-time tuition and fees is required to choose the Thesis Option.

An assistantship is renewable for a second academic year provided the student remains in good academic standing and makes satisfactory progress towards completion of the MSE or MSISE. An award made to a student who does not perform adequately in his or her duties may be rescinded after the first semester of the award period. In extreme circumstances, an award may be rescinded before the end of a semester.

An application for assistantship consists of a résumé and letter of interest addressed to the department chair. For the following academic year, the deadline for application for an assistantship beginning in the Fall semester is April 1. Subject to availability of funds, assistantships may be granted to begin in the Spring semester.

## ENGLISH (M.A.)

## Program Director: Dr. Ted Taylor

The Department of English and Foreign Languages offers a general program of study leading to a Masters of Arts (M.A.) in English.

## Program Goals

The general goals of the English M.A. program are to prepare students for success and advancement in careers in teaching, writing, and scholarship, and to develop their knowledge and skills in the discipline of English studies to professional levels in the following areas:

- The in-depth study of literature.
- Aspects of literary history and cultural studies.
- Literary criticism and theories of reading and interpretation.
- Theories of writing and rhetoric.
- Practical writing skills in a range of professional and creative genres.
- Research techniques for and understanding of the discipline of English studies.
- Pedagogical theories and techniques for various aspects and levels of English studies.


## Expected Student Learning Outcomes

- Demonstrates professional level of competency in the study of literature.
- Incorporates theories and strategies of literary and rhetorical criticism at a professional level.
- Reveals professional-level writing skills appropriate to the genre(s) of the work.
- Employs research strategies for English studies in a professional manner.
- Manifests professional understanding of pedagogical theories and strategies appropriate to English.
- Speaks in informed and articulate ways about a range of theory, research, and resources relevant to literature, language, rhetoric, and composition studies.
- Produces writing competitive at a publishable level, which reflects an understanding of the creative writing genres, the business of writing, and the drafting and revision process for individual and collections of works.


## Outcomes Assessment Activities

The following measures of learning outcomes will be employed:

- Each student, on completion of the program, fills out a questionnaire keyed in part to the program goals. The questionnaire also invites general comments about the program's merits and suggestions for improvement.
- Students' M.A. theses or independent research project essays are evaluated by the thesis director and committee members against a set of rubrics keyed to the program goals.
- All audience members at the oral defenses of theses or independent research project papers are asked to comment in writing on the student's skills and knowledge as evidenced in their performance, and their responses are tabulated cumulatively.


## Admission Requirements

General requirements for admission to graduate school at CSU-Pueblo are specified in the Colorado State University-Pueblo Catalog. For English, requirements include a minimum of 3.0 undergraduate grade point average on a 4.0 scale and a Bachelor's degree in English or a related field, with advanced coursework in British and American literature. The Graduate Record Examination is recommended, but not required. Because of necessary enrollment limitations, admission will be competitive; deferred admission is possible.

1. Fill out a copy of the CSU-Pueblo Application for Graduate Admission. This is a two-page form available from the Admissions and Records Office and on-line. If you need help getting a copy, e-mail to the address given below.
2. Order official copies of all transcripts and send to the Graduate coordinator at the postal address below.
3. Write an application statement that gives a detailed account of your background and qualifications and your purpose in seeking the M.A. in English, both practical and intellectual. The Graduate Committee in English understands that students who apply to our graduate program share our dedication and passion for literature and language. In this application statement, we ask that candidates focus on their
intellectual life, professional history, and scholarly background in order to demonstrate their potential for success in a rigorous graduate program.
4. Also submit a writing sample of at least 10 pages, such as a paper written for previous English course or another analytic or argumentative essay. If you wish to submit creative work for your writing sample, it should be accompanied by a 5 -page commentary.
5. Solicit three letters of recommendation from references able to evaluate your preparation and likelihood of success in graduate study in English. For those who have recently been undergraduate students, former professors are ideal reverences. For those long past their undergraduate studies, recommendations from supervisors, colleagues, and others familiar with your work and intellectual abilities can serve as well. If you have been out of school for awhile, but have old letters of recommendations on hand, you may submit them, but please be sure to include at least one current letter. You may collect the letters and submit them with your other application materials, or, if your references prefer, you may have them sent directly to the address below.
6. Prepare a check for the application fee of $\$ 35$ made out to Colorado State University-Pueblo and enclose it with your other application materials.
7. Send, or have sent, all these materials (the application form, the check for $\$ 35$, the application statement, the writing sample, the three letters of recommendation, and the official transcripts) to:

## Graduate Coordinator <br> Department of English and Foreign Languages Colorado State University-Pueblo <br> 2200 Bonforte Blvd. <br> Pueblo, CO 81001-4901

If you have any questions, please fee free to phone (719-549-2143).

Financial aid in the form of student loans and perhaps some need-based grants may be available. You may apply for it only after your admission to the program is official, but you may inquire about the application process, eligibility, etc. at any time by contacting Financial Aid at (719) 549-2232 or on-line at www.colostate-pueblo.edu/sfs

We accept applications once a year, for fall admission to the program. Please submit your application materials as early as possible-no later than April 1.

## Graduation Requirements

Students must maintain an overall grade-point average of 3.00 or higher in courses taken after admission to the degree program. A minimum of 24 credits must be earned at Colorado State University-Pueblo, 21 of which must be earned after admission to the graduate program. Courses
from other institutions must be approved by the Graduate Coordinator and officially transferred and appear on the transcript.

## Major Requirements

## PLAN A:

Nine or ten courses (27-30 credits) at the 500 level, plus a thesis (ENG 599) for 3-6 credits and oral defense of the thesis-for a minimum of 32 credits

## PLAN B:

Eleven or twelve courses (33-36) at the 500 level, plus an Independent Study project (ENG 595) for 3-6 credits and an oral presentation of the project-for a minimum of 35 credits.

## HISTORY (M.A.)

## Program Director: Dr. Matthew Harris

The Department of History offers a general program of study leading to a Master of Arts (M.A.) in History.

## Program Goals

The goals of the History Program at Colorado State University are:

- To provide students with a general knowledge of history and historical methodology.
- To introduce students to the theoretical works that serve as the foundation of historical scholarship.
- To prepare students, through training in communication skills and in research methods, to gain knowledge of certain areas of history.
- To prepare students to continue independent personal study and learning about specific subject areas.
- To prepare students to engage in critical thinking.


## Expected Student Learning Outcomes

- Be able to draw conclusions about the historiography of the subjects they have studied.
- Be able to read and interpret secondary sources from any discipline of history concerning any area of the world.
- Be able to read and interpret primary source documents from a wide range of time periods.
- Be able to demonstrate skills in historical research and analysis and to defend their conclusions in wellwritten papers.
- Be able to compete successfully in appropriate job markets or gain admission to history PhD programs.


## Outcomes Assessment Activities

Faculty members in the MA program in History at CSUPueblo use several measures to gauge student learning. These include the Documents Based Questions (DBQ) papers, in which students write $8-12$ page papers critically appraising a set of primary source documents. Students are also required to take a written or oral examination at the end of their study, demonstrating mastery over the content they learned. Faculty will use the results of these assessment measures to enhance and invigorate student learning.

## Application Instructions

Submit the Colorado State University-Pueblo Application for Graduate Admission form, available from the Office of Admissions. Submit the $\$ 35.00$ Application Fee. Also send a curriculum vitae or resume, a letter of intent and official college transcripts from all colleges/universities attended. Students may also submit a 10-15 page writing sample for consideration. No standardized test of any kind is required for admittance into the program.

Submit requested information to:
Graduate Director
Department of History
Colorado State University-Pueblo
2200 Bonforte Boulevard
Pueblo, CO 81001-4901
The deadline for applications will be May 1 of each year for admission the next fall. Students wishing to begin coursework in the spring must submit all admissions materials but will be admitted only on a provisional basis until the next cycle.

## Degree Requirements

All students must fulfill the following requirements for a graduate degree in History.

- A cumulative graduate GPA of 3.000 or better at graduation. There will be a maximum limit of 12 credits transferable from other graduate institutions or 12 credits from courses taught at CSU-Pueblo before start of M.A. Program. It will be the responsibility of the Graduate Director to determine which credits will be accepted. Once students reach the thesis or exam stage, students will be required to take at least three credits each fall and spring semester in order to consult with faculty with respect to their thesis or exam. Those who do not will be dropped from the program.
- Have regular student status.
- Complete the program's minimum number of hours of approved course work ( 30 semester hours).
- Successful completion of either thesis or examination option as required by the selected emphasis area. (Please note that if a student fails the exam, he or she will be allowed to retake the exam one time in the following fall semester for a total of two attempts.)
- Submit a Graduation Planning Sheet as advised by your program by the deadline listed on the Masters Graduate Planning Sheet.


## Specific Requirements

Students can choose to take an examination or choose the thesis option. Students will be encouraged to take an examination instead of the thesis option.

| Courses | Titles | Credits |
| :--- | :--- | ---: |
| HIST 588 | Historiography and Theory .......................... 3 |  |
| HIST 593 | Seminar.......................................... 3 <br> Electives selected in consultation |  |
| HIST | with graduate advisor............................ 21 |  |
| HIST 599 | Thesis Research (last term) <br> OR |  |
| HIST 589 | Directed Study for Prelim Exams ............ 3 <br> (last term) |  |

TOTAL 30

## GRADUATE PROGRAMS WITH A MAJOR IN NURSING (MS)

Associate Dean: Dr. Donna Wofford<br>Graduate Coordinator: Dr. Joe Franta

Faculty: Crownover, DeNiro, Howard, Rooney, Samaras, Smiley, Whetzel, Williams

The Department of Nursing offers a Master of Science (MS) with a major in Nursing in the following emphasis areas:

- Adult/Gerontology Acute Care Nurse Practitioner (ACNP)
- Adult/Gerontology Acute Care/Family Nurse Practitioner (ACNP/FNP)
- Psychiatric-Mental Health Nurse Practitioner (PMHNP)
- Nurse Educator

Graduate programs are delivered using a hybrid format (on/off campus and on-line).

## Department Mission

The mission of the Department of Nursing is to prepare graduates for professional positions as safe, competent and caring nurses to meet the health care needs of diverse populations.

## Program Outcomes

1. Eighty percent of graduates will:

- Complete the program within one and one half times the length of the program.
- Express satisfaction with the program.
- Pass national certification exam the first time.
- Be employed in role related professional practice within six months to one year.

2. Eighty percent of employers will express satisfaction with graduates' job performance.

Student Learning Outcomes for Nurse Practitioner Programs

At the completion of the program, graduates will be able to:

1. Integrate evidence-based practice, ethical decision making and technology into advanced nursing practice.
2. Utilize interprofessional collaboration to provide safe, quality patient-centered care.
3. Lead quality improvement initiatives that affect delivery of advanced nursing practice and health care services.

## Adult/Gerontology Acute Care Nurse Practitioner Emphasis (ACNP)

This program prepares students to provide evidencebased, safe, quality patient-centered care in a variety of chronic, acute, and emergent care settings. The graduate will be eligible to take the Acute Care Nurse Practitioner certification examination. The following courses are required.

| Fall (Year 1) |  |  |
| :---: | :---: | :---: |
| Courses | Titles | Credits |
| NSG 506 | Roles, Ethics \& Issues | . 3 |
| NSG 508 | Advanced Practice Theory | . 3 |
| NSG 551 | Health Promotion |  |
| Spring |  |  |
| Courses | Titles | Credits |
| NSG 552 | Advanced Pathophysiology. |  |
| NSG 562 | Advanced Assessment. | ....... 2 |
| NSG 562/L | Advanced Assessment Lab. | .... 1 |

NSG 571 Healthcare Informatics ..... 2
NSG 592 Research ..... 3
Summer
Courses Titles Credits
NSG 550 Health Policy \& Finance ..... 3
NSG 561 Advanced Pharmacology ..... 3
NSG 610 Diagnostic Reasoning ..... 2
Fall (Year 2)
Courses Titles ..... Credits
NSG 612L Acute Care Skills Lab. ..... 2
NSG 620 Acute Care Adult/Gerontology I ..... 2
NSG 620L Acute Care Adult/Gerontology Practicum I. ..... 4
Spring
Courses TitlesNSG 621 Acute Care Adult/Gerontology II4
NSG 621L Acute Care Adult/Gerontology Practicum II ..... 4
Summer
Courses Titles Credits
NSG 622 Acute Care Adult/Gerontology III ..... 4
NSG 622L Acute Care Adult/Gerontology Practicum III ..... 4
Total Lab Hours ..... 90
Total ACNP Clinical Semester Hours ..... 570
Total Program Credits ..... 51
Adult/Gerontology Acute Care/Family Nurse Practitioner Emphasis (ACNP/FNP)

This program prepares students to provide evidencebased, safe, quality patient-centered care in a variety of chronic, acute, and emergent care settings. Students will also be prepared for primary care practice across the lifespan. The graduate will be eligible to take the Acute Care Nurse Practitioner certification examination and Family Nurse Practitioner certification examination. The following courses are required:

## Fall (Year 1)

Courses Titles Credits
NSG 506 Roles, Ethics \& Issues ............................... 3
NSG 508 Advanced Practice Theory.......................... 3
NSG 551 Health Promotion........................................ 2

## Spring

Courses Titles Credits
NSG 552 Advanced Pathophysiology........................ 3
NSG 562 Advanced Assessment ............................... 2
NSG 562L Advanced Assessment Lab ........................ 1
NSG 571 Healthcare Informatics................................ 2
NSG 592 Research ................................................... 3

| Summer |  |  |
| :--- | :--- | ---: |
| Courses | Titles | Credits |
| NSG 550 | Health Policy \& Finance ........................... 3 |  |
| NSG 561 | Advanced Pharmacology ......................... 3 |  |
| NSG 610 | Diagnostic Reasoning............................... 2 |  |

NSG 551 Health Promotion ..... 2
NSG 676 Theoretical Mental Health Models ..... 2
Spring
Courses Titles Credits
NSG 552 Advanced Pathophysiology ..... 3 ..... 3
NSG 562 Advanced Assessment ..... 2
NSG 562/L Advanced Assessment Lab ..... 1
NSG 571 Healthcare Informatics ..... 2
NSG 592 Research ..... 3
Summer
Courses CreditsNSG 550 Health Policy \& Finance
3NSG 561 Advanced Pharmacology
3NSG 678 Psychiatric Assessment \& Evaluation
NSG 679 Psychiatric Differential Diagnosis ..... 2
Fall (Year 2)
Courses Titles Credits
NSG 677 Psychopharmacology. ..... 2
NSG 681 Psych Mental Health I ..... 2
NSG 681L PMH Practicum I ..... 4
Spring Courses Titles Credits
NSG 682 Psych Mental Health II ..... 4
NSG 682L PMH Practicum II ..... 4
Summer
Courses Titles Credits
NSG 683 Psych Mental Health III ..... 4
NSG 683L PMH Practicum III ..... 4
Total Lab Hours ..... 30
Total Clinical Practice Hours. ..... 570
Total Program Credits ..... 55

## Nurse Educator Emphasis

## Nurse Educator Student Learning Outcomes

At the completion of this program, graduates will be able to:

1. Implement evidence-based teaching techniques and scholarly inquiry in educational settings with diverse learners.
2. Participate in curriculum design and evaluation of outcomes.
3. Participate in interdisciplinary efforts to address educational needs in local, regional, state, national and international forums.
4. Assume a leadership role in shaping and implementing change.

This program prepares the nurse to practice as faculty in colleges, universities, hospital-based schools of nursing or technical schools, or as staff development educators in health care facilities. The graduate will be eligible to take the National League for Nursing Certified Nurse Educator Examination. Master's-prepared nurses may complete a post graduate certificate in the nurse educator emphasis. The following courses are required:

## Fall (Year 1)

$\begin{array}{lll}\text { Courses } & \text { Titles } & \text { Credits } \\ \text { NSG } 506 & \text { Roles, Ethics \& Issues ........................... } 3\end{array}$
NSG 508 Advanced Practice Theory.......................... 3
NSG 551 Health Promotion ........................................ 2

## Spring <br> Courses Titles Credits <br> NSG 552 Advanced Pathophysiology......................... 3 <br> NSG 562 Advanced Assessment............................... 2 <br> NSG 562/L Advanced Assessment Lab......................... 1 <br> NSG 571 Healthcare Informatics ................................ 2 <br> NSG 592 Research.................................................... 3

| Summer |  |  |
| :--- | :--- | :--- |
| Courses | Titles | Credits |
| NSG 561 | Advanced Pharmacology ........................... 3 |  |

## Fall (Year 2)

Courses

## Titles

Credits
NSG 575 Curriculum Development............................. 2
NSG 576 Instructional Strategies............................... 3
NSG 577 Assessment \& Evaluation ........................... 2

## Spring

Courses Titles Credits
NSG 583 Nurse Educator Seminar............................. 3
NSG 583L Nurse Educator Practicum .......................... 6
NSG 593 Thesis Seminar .......................................... 3
Summer
Courses Titles Credits
NSG 599 Thesis Research ..................................... 3-6
Total Program Credits................................................... 44

## Admission Criteria

Students are responsible for following all admission policies and procedures as outlined in the Graduate Programs section of the University catalog.

1. Baccalaureate degree in nursing from an institution accredited by a regional accreditation agency (or equivalent).
2. 4000 hours ( 2 years full-time) experience as a registered nurse (Nurse Educator emphasis only).
3. 2000 Hours (1 year full-time) experience as a registered nurse (ACNP, ACNP/FNP and PMHNP emphases only).
4. Undergraduate BSN cumulative GPA of 3.0.
5. Undergraduate statistics course with a grade of $C$ or higher.
6. Application for admission to graduate programs in the Office of Admission (admission to graduate programs does not constitute admission to the nursing graduate program).
7. Application for admission to nursing graduate program in the Department of Nursing.
8. Proof of active, unrestricted Colorado Registered Nurse license.
9. Background check per Colorado Law (see application).
10. Current immunizations as stated on application.
11. Current certification in CPR (Health Care Provider - C or equivalent).
12. Three letters of recommendation:
a. Professional or Academic
b. Clinical
c. Other
13. Letter of intent that includes:
a. Brief history of self
b. Reason for pursuing advanced degree
c. How applicant will manage work, home, and study
14. Curriculum Vitae
(Use the template located under Graduate Nursing Student Application Instructions on the website)

Preference for acceptance will be given to applicants who have:

1. More than 2 years of practice experience
2. One year or more of experience as a clinical adjunct instructor (Nurse Educator only)
3. Residency in Southern Colorado
4. Graduate from CSU-Pueblo

If accepted into the MS program, requirements prior to attending first class include:

1. Drug screen
2. Physical exam within last 12 months

## Graduation Requirements for MS

The graduate degree will be granted to candidates who meet all of the University catalog requirements plus the following:

1. Graduate cumulative GPA of 3.0 or better.
2. All courses must be passed with a B or better.
3. Completed comprehensive exam or thesis. Thesis required for nurse educator.

## Acceptance of Transfer Credits

Transfer credit will be awarded per the published Graduate Programs section of the University catalog. Nine semester hours of transfer credits from an accredited institution may be applied to the degree with approval of the graduate program coordinator.

## Time Limits

Courses completed 6 or more years before the date of graduation will not be accepted as satisfying graduation requirements without the approval by the graduate nursing program coordinator.

## Post-Graduate Fellowships

Optional post-graduate fellowships may be available for qualified individuals. Fellowships will provide experience with vulnerable populations during an 1800 clinical hour first year experience. An 1800 clinical hour second year fellowship may be available. Upon completion of both years, the nurse practitioner will have the required number of house to apply for prescriptive authority in Colorado. Fellowships include stipends and benefits. Please contact the graduate nursing program coordinator for details.

## POST MASTERS CERTIFICATION

- Adult/Gerontology Acute Care Nurse Practitioner
- Adult/Gerontology Acute Care/Family Nurse Practitioner
- Psychiatric-Mental Health Nurse Practitioner

Students seeking post masters certification in the program who already have a nursing graduate degree are evaluated on an individual basis. Their plan of study is based on their academic credentials. The Colorado State University-Pueblo requirements state a student must complete a minimum of 15 postgraduate credit hours to be eligible for a post masters certification. Core courses must be completed to meet the mandates of the Colorado State Board of Nursing for Advanced Nursing Practice. A total of 500 clinical hours must be documented. The student's plan is developed based on the academic course work already completed. Post masters certification can be earned in all emphasis areas. Students must have 500 clinical hours documented on completion of the post master's certificate.

## Accredited by:

National League for Nursing Accrediting Commission, Inc. 3343 Peachtree Road NE, Suite 500
Atlanta, Georgia 30326
Phone: (404) 975-5000
Fax: (404) 975-5020

## COLLEGE OF EDUCATION, ENGINEERING, AND PROFESSIONAL STUDIES

## Academic Departments

## Engineering Technology, Construction and

 Automotive Industry ManagementMajors: Automotive Industry Management (BS)<br>Civil Engineering Technology (BSCET)<br>Construction Management (BS)

Minor: Automotive Industry Management

## Engineering

Majors: Engineering (BSE) -Specialization: Mechatronics
Engineering (MS)
(See Graduate Programs section of catalog)
Emphasis Areas:
Mechatronics
Railroad Engineering
Industrial Engineering (BSIE)
Industrial and Systems Engineering (MS)
(See Graduate Programs section of catalog)
Minors: Engineering
Industrial Engineering
Exercise Science, Health Promotion, and Recreation
Major: Athletic Training (BS)
Exercise Science, Health Promotion and
Recreation (BS)
Emphasis Areas:
Community/Commercial Recreation
General Exercise Science
Health Promotion/ Wellness
K-12 Physical Education Teacher
Preparation
Outdoor Leadership
Minors: Coaching
Exercise Science and Health Promotion
Fitness and Recreational Sports Management Outdoor Physical Education
Recreation

## Nursing

Major: $\quad$ Nursing (BSN)
Nursing (MS)
(See Graduate Programs section of catalog)

Emphasis Areas for MS Nursing: Adult/Gerontology Acute Care Nurse Practitioner<br>Adult/Gerontology Acute Care/Family Nurse Practitioner<br>Nurse Educator<br>Psychiatric-Mental Health Nurse Practitioner<br>Post Masters Certification

## Teacher Education

Major: Liberal Studies (BS) Education (M.Ed.)
(See Graduate Programs section of catalog) Emphasis Areas:

Art Education
Early Learning
Foreign Language
Health \& Physical Education
Instructional Technology
Linguistically Diverse Education
Music Education
Space Studies for Educators
Special Education
Licensure Areas: Elementary
Secondary
K-12

Minors: Education
Reading

## Mission

The College of Education, Engineering, and Professional Studies degree programs reflect Colorado State University-Pueblo's professional focus and are designed to prepare graduates for positions in industry, education, business, and governmental agencies.

The mission of the College is to offer a career-oriented education that efficiently and effectively prepares students to excel as professionals.

Mission objectives:

- To be the premier educational institution in Southern Colorado that provides professional programs.
- To be the preferred source in Southern Colorado for consulting services, research effort, service learning,
and other linkages to the public schools, industry, and the community.
- To be recognized for effectiveness in the professional development of faculty, staff, and students.

The College embraces the model of continuous improvement through the use of assessment in evaluating and improving student learning.

# DEPARTMENT OF ENGINEERING TECHNOLOGY, CONSTRUCTION AND AUTOMOTIVE INDUSTRY MANAGEMENT 

Department Chair: Sylvester A. Kalevela

# AUTOMOTIVE INDUSTRY MANAGEMENT PROGRAM 

Program Coordinator: Cathi J. Robbe

Faculty: Bencini, Robbe, Smith
The major in Automotive Industry Management (AIM) leads to a Bachelor of Science (BS) Degree with a Business Administration minor. The AIM program also offers an AIM minor to complement other CSU-Pueblo degrees. The AIM degree is designed to prepare students for automotive industry management careers by providing automotive management skills, supported by the business and technical background requisite for success in the automotive industry. The curriculum emphasizes personnel supervision, financial analysis, customer relations, warranty administration, sales promotions and techniques of technical problem-solving, service management, marketing, merchandising and distribution methods used by the automotive aftermarket, automotive manufacturer and import industries.

## Program Goals

- Prepare students with the appropriate knowledge and skills to enter the workforce as productive, accountable and responsible employees.
- To provide students with theoretical and hands-on laboratory experiences designed to develop the knowledge and skills for success in automotive management careers.
- To utilize an advisory committee of automotive business leaders to advise and support the AIM program on a range of issues, which includes keeping the curriculum current with industry needs.


## Student Learning Outcomes

Students in the AIM Program will be able to:

- Analyze profitability, efficiency and productivity using automotive financial documents and determine an appropriate managerial course of action;
- Manage and implement retail inventory control systems including loss sales reporting, pricing, and benchmarking and distribution systems;
- Recognize and apply proper health, safety, and environmental regulations based on federal and state standards;
- Demonstrate critical thinking and problem solving in the diagnosis and service of automotive systems;
- Effectively communicate concern, cause, correction and confirmation regarding vehicle diagnosis and service to both the technician and/or customer;
- Develop professional writing and oral presentation skills regarding techniques for selling in the automotive industry; and
- Develop employment seeking skills and compile a professional development portfolio commensurate with AIM degree and entry level management positions within the automotive industry.


## General Requirements for the AIM Program

- AIM majors are required to complete an approved curriculum with a minimum grade of $C$ earned in all courses having an AIM prefix.
- AIM majors are required to demonstrate intellectual skills and knowledge in related business courses to satisfy the minor and institutional requirements.
- AIM minors are required to complete the approved curriculum with a minimum grade of $C$ earned in all minor courses having an AIM prefix.


## Requirements for the AIM Major

| AIM | urses | Titles Credits |
| :---: | :---: | :---: |
| AIM | 105 | Intro to the Parts \& Service Industry ..... 1 |
| AIM | 115 | Automotive Engine Design, Operation and Repair .5 |
| AIM | 125/L | Automotive Suspension \& Brake Systems/Lab. $\qquad$ 4 |
| AIM | 155 | Automotive Parts Operations.............. 4 |
| AIM | 165/L | Automotive Power Trains \& Drive <br> Lines/Lab $\qquad$ |
| AIM | 235/L |  <br> Exhaust Emissions/Lab $\qquad$ |
| AIM | 245/L | Automotive Electrical Systems I/Lab..... 4 |
| AIM | 255/L | Automotive Electrical <br> Systems II/Lab |
| AIM | 265 | Automotive Parts Management Systems. $\qquad$ 4 |
| AIM | 305 | Auto Customer Service Regulatory Issues $\qquad$ 3 |


| AIM | 325 | Fuels and Lubricant Production, <br> Marketing and Conservation .............. 3 |
| :--- | :--- | :--- |
| AIM | 335 | Automotive Shop Practices................ 5 <br> AIM |
| 345 | Advanced Automotive Systems .......... 5 |  |
| AIM | 405 |  <br> Techniques ...................................... 4 |
| AIM | 425 | Automotive Financial Management...... 5 |

$$
\text { TOTAL } 59
$$

## Other Required Major Courses*

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| BUSAD | 302 | Ethics in Business............................... 3 |
| CIS | xxx | Course(s) Guided Electives .................. 2 |
| MGMT | 311 | Operations and Quality Management ... 3 |
| MGMT | 318 | Human Resource Management........... 3 |
| MATH | 156 | Introduction to Statistics.................... 3 |
| SPCOM | 103 | Speaking and Listening ..................... 3 |

TOTAL 17
*Students must complete these required major courses with a cumulative grade point average of 2.0 or better.

## Specific Business Administration Minor Courses*

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| ACCTG | 201 | Principles of Financial Accounting ........ 3 |
| ACCTG | 202 | Principles of Managerial Accounting..... 3 |
| ECON | 201 | Principles of Macroeconomics ............. 3 |
| ECON | 202 | Principles of Microeconomics |
| FIN | 330 | Principles of Finance |
| MGMT | 201 | Principles of Management |
| MKTG | 340 | Principles of Marketing |

TOTAL 21
*A cumulative grade point average of 2.000 is required in the BUSAD minor courses.

## Institutional and General Education

Please refer to the General Education Requirements in the Undergraduate Programs section of this catalog or refer to your individual program's curriculum sheet.

## Requirements for the AIM Minor

| AIM Courses | Titles | Credits |
| :--- | :---: | :--- |
| AIM | 115 | Automotive Engine Design, <br> Operation and Repair .......................... 5 |
| AIM | $235 / \mathrm{L}$ | Automotive Fuel Systems and <br> Exhaust Emissions/Lab ....................... 4 |
| AIM | $245 /$ L | Automotive Electrical Systems I/Lab.... 4 |
| Approved AIM Electives (min) .................................. 7 |  |  |

TOTAL 20

## Outcomes Assessment Activities

- Graduating students complete an exit survey that provides feedback on the quality and usefulness of the coursework for professional preparation.
- Employer surveys are collected every three years.
- The AIM Advisory Committee meets every fall semester to review the three year cycle report and make suggestions for program improvement. The committee also meets with current AIM students for an open discussion regarding the AIM program.
- Assessment materials are collected yearly, (except the employer survey) and analyzed and reported on a three year cycle.


## CIVIL ENGINEERING TECHNOLOGY PROGRAM

Program Coordinator: Sylvester A. Kalevela
Faculty: Kalevela, Mincic
The major in civil engineering technology leads to a Bachelor of Science in Civil Engineering Technology (BSCET) Degree. This program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org

## Program Education Objectives

The objective of the Civil Engineering Technology (CET) program at Colorado State University-Pueblo is to provide an integrated educational experience so that its graduates are:

- Prepared to apply established engineering principles and standards of practice in developing solutions to civil engineering problems, and
- Prepared for successful careers in civil engineering by providing them with the ability to contribute to engineering teams in various practice areas including (a) engineering analysis and design, (b) construction planning and management, (c) experimentation, (d) technical documentation, and (e) systems operations or maintenance.


## Program Emphasis

The CET major is designed to produce civil engineering technologists who (a) are capable of performing engineering surveys; (b) can perform standard analysis and design of elements of structures, water systems, and transportation systems; (c) are capable of conducting standard laboratory and field tests for construction materials and soils; and (d) can manage a construction project.

The civil engineering technology curriculum places emphasis on hands-on experience obtained through laboratory activities that include: (a) testing engineering/ construction materials; (b) developing technical solutions to problems using established engineering analysis and design principles; (c) performing cost and economic analysis of technical solutions; and (d) developing plans and schedules for construction projects.

## Student Learning Outcomes

Students who complete the CET program at CSU-Pueblo will have the ability to:

- Apply knowledge, techniques, skills, and tools of the civil engineering discipline to engineering technology activities;
- Select and apply a knowledge of mathematics, science, engineering, and technology to civil engineering technology problems;
- Conduct standard tests and measurements, analyze and interpret experimental data, and apply experimental results to improve processes;
- Design systems, components, or processes for civil engineering technology problems;
- Function effectively as members or leaders on a technical team;
- Identify, analyze, and solve broadly-defined engineering technology problems;
- Communicate effectively regarding subjects related to engineering technology activities;
- Demonstrate a disposition to engage in self-directed continuing professional development;
- Demonstrate an understanding of professional and ethical responsibilities;
- Demonstrate an understanding of the impact of engineering technology solutions to society; and
- Demonstrate commitment to quality, timeliness, and continuous improvement.

In addition, in order to enable graduates to attain the CET program educational objectives, CET students are trained to acquire specific skills and the ability to:

- Utilize principles and appropriate technology to produce drawings, reports, quantity estimates, and other documents related to civil engineering;
- Conduct standardized field and laboratory tests related to civil engineering;
- Utilize surveying methods and equipment to perform land measurement or construction layout;
- Apply fundamental computational methods and elementary analytical techniques to solve civil engineering technology problems;
- Plan and prepare documents appropriate for design and construction;
- Perform economic analyses and cost estimates related to design, construction, operations and maintenance of systems associated with civil engineering;
- Select appropriate engineering materials and practices; and
- Perform standard analysis and design of elements for structures, hydraulic and hydrologic systems, construction operations, and transportation systems.


## The Civil Engineering Technology Curriculum

The CET curriculum consists of courses listed under the following major categories:

## Math, Science and Computer Courses

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | ---: |
| CIS | 100 | Intro to Word and Windows ................. 1 |  |
| CIS | 103 | PowerPoint and Web Publishing ......... 1 |  |
| CIS | 104 | Excel Spreadsheets........................ 1 |  |
| CHEM | $111 /$ L | Principles of Chemistry/Lab ................ 4 |  |
| MATH | 121 | College Algebra .................................... 4 |  |
| MATH | 124 | Pre-Calculus Math .......................... 5 |  |
| MATH | 126 | Calculus \& Analytic Geometry I ......... 5 |  |
| PHYS | 201/L | Principles of Physics I/Lab............... 4 |  |

TOTAL 25

## Technical Sciences for Civil Engineering Technology

Courses Titles Credits

CET 202 Statics.................................................. 3
CET 206 Strengths of Materials........................... 4
CET 222 Dynamics.............................................. 3
CET 226 Engineering Problem Solving ............... 2
TOTAL 12

## Civil Engineering Technology Courses

| Cour |  | Titles Credits |
| :---: | :---: | :---: |
| CET | 101 | Intro to Civil Engineering Technology ... 2 |
| CET | 102 | Surveying I....................................... 3 |
| CET | 103 | Surveying II...................................... 3 |
| CET | 115 | Civil Drafting I................................... 3 |
| CET | 116 | Civil Drafting II .................................. 3 |
| CET | 207 | Construction Materials \& Methods ....... 3 |
| CET | 208 | Concrete \& Asphalt Materials .............. 3 |
| CET | 305 | Heavy/Highway Cost Estimating.......... 3 |
| CET | 315 | Soil Mechanics Technology ................ 3 |
| CET | 316 | Structural Analysis............................. 3 |
| CET | 317 | Hydraulics........................................ 3 |
| CET | 372 | Traffic Analysis and Control................ 3 |
| CET | 404 | Structural Steel Design...................... 3 |
| CET | 405 | Reinforced Concrete Design............... 3 |
| CET | 412 | Hydrology ........................................ 3 |
| CET | 415 | Water \& Sewer Systems Design.......... 3 |


| CET | 455 | Senior Project Seminar...................... 1 |
| :---: | :---: | :---: |
| CET | 456 | Senior Project ................................... 3 |
| CET | 473 | Highway Design................................ 3 |

Civil Engineering Technology Elective Courses (Select two courses for a total of 6 credits.)

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| CET | 303 | Construction Management.................. 3 |
| CET | 304 | Building Cost Estimating.................... 3 |
| CET | 312 | Route Surveying ............................... 3 |
| CET | 401 | Land Surveying................................. 3 |
| CET | 414 | Bridge Design ................................... 3 |
| CET | 475 | Engineer-in-Training Preparation......... 3 |
| CET | 491 | Special Topics ......................... 1-3 Var |
| CET | 495 | Independent Study.................... 1-3 Var |

TOTAL 6

## Technical Elective

## Course <br> Title <br> Credits

Technical Elective (3 credit hours)

## Graduation Requirements

## CET Program Requirements

- Students are required to complete an approved program of study with a cumulative GPA of 2.000 or better in the CET major courses.
- Students are required to demonstrate skill and knowledge in the areas of quantitative analysis and science by having a cumulative GPA of 2.000 or better in the required mathematics and physics courses.
- Civil Engineering Technology majors are required to demonstrate the ability to solve problems appropriate to their discipline and to complete a final senior-year technical project requiring a written report and an oral presentation.


## Institutional and General Education

To complete the General Education requirements, students are required to take a total of 35 credit hours consisting of the skills and knowledge components as specified under the undergraduate General Education Requirements section of this catalog. Civil Engineering Technology (CET) students take 11 of the 35 credit hours of the general education requirements under the required math and physical science courses.

Therefore, the CET majors are expected to take 24 credit hours to complete the skills and knowledge components of the general education requirements. The
skills and knowledge components include (a) Written Communication ( 6 credit hours), (b) Humanities and Speech Communication (9 credit hours), (c) History (3 credit hours) and (d) Social Sciences (6 credit hours). Please refer to the undergraduate General Education Requirements section of this catalog for actual courses required to fulfill the skills and knowledge components.

General Education Requirements in Written

Communication, Humanities, History and

Social Sciences

24

## Co-curricular Activities

The CET faculty supports and encourages the involvement of civil engineering technology majors in at least one technical organization relevant to the civil engineering discipline.

## Outcomes Assessment Activities

- To be eligible for graduation, all civil engineering technology majors are required to take an exit examination. The results of the exit examination are used in the evaluation of the program but have no effect on student's GPA.
- Graduates and their employers are surveyed on program satisfaction and job performance following their graduation.


## Civil Engineering Technology Typical Schedule of Courses

## Freshman - Fall

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| CET | 101 | Intro to Engineering Technology............... 2 |
| CET | 102 | Surveying I ......................................... 3 |
| CET | 115 | Civil Drafting I .................................. 3 |
| CIS | 100 | Intro to Word \& Windows....................... 1 |
| CIS | 103 | PowerPoint and Web Publishing ............ 1 |
| CIS | 104 | Excel Spreadsheets ............................. 1 |
| MATH | 121 | College Algebra............................... 4 |

$\overline{\text { TOTAL } 15}$

## Freshman - Spring

| Courses | Titles | Credits |
| :--- | :--- | ---: |
| CET 103 | Surveying II ............................................ 3 |  |

CET 116 Civil Drafting II........................................ 3
ENG 101 Composition I......................................... 3
MATH 124 Pre-Calculus Math................................... 5
General Education: Humanities ........................................ 3
$\overline{\text { TOTAL } \quad 17}$

| Sophomore - Fall |  |  |  |
| :--- | :--- | :--- | ---: |
| Courses |  |  |  | Titles $\quad$ Credits

TOTAL 17

## Sophomore - Spring

| Courses | Titles | Credits |
| :--- | :--- | :--- | :--- |
| CET | 206 | Strength of Materials............................ 4 |

CET 208 Concrete and Asphalt Materials............ 3
CET 222 Dynamics.............................................. 3
ENG 102 Composition II....................................... 3
General Education: Social Science .................................. 3
TOTAL 16

## Junior - Fall

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| CET | 305 | Heavy/Highway Cost Estimating.......... 3 |

CET 316 Structural Analysis ................................ 3
CET 317 Hydraulics.............................................. 3
CHEM 111/L Principles of Chemistry/Lab .................. 4
SPCOM 103 Speaking and Listening ........................ 3
TOTAL 16

## Junior - Spring

| Courses | Titles | Credits |  |
| :--- | :--- | :--- | :--- |
| CET | 315 | Soil Mechanics Technology | .................. 3 |

CET 372 Traffic Analysis and Control.................. 3
CET 412 Hydrology ............................................. 3
General Education: Humanities.......................................... 3
General Education: Social Science .................................... 3
TOTAL 15

## Senior - Fall

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| CET | 405 | Reinforced Concrete Design | ....... 3 |
| CET | 415 | Water \& Sewer System Design | ........ 3 |
| CET | 455 | Senior Project Seminar |  |
| CET | 473 | Highway Design. | 3 |
| CET Elective ..................................................... 3 |  |  |  |
| General Education: History |  |  |  |

## Senior - Spring



Total required credit hours 124

## CONSTRUCTION MANAGEMENT PROGRAM

Program Coordinator: Michael A. Mincic

Faculty: Kalevela, Mincic, Trujillo
The major in construction management leads to the Bachelor of Science (BS) degree in Construction Management. Graduates of the Construction Management (CM) program enter the industry as project superintendents, field supervisors, project managers, or owner's representatives for a variety of construction related firms such as general contractors, specialty subcontractors, construction managers, designers, developers, consultants, or owners.

## Program Goals

The goal of the Construction Management program is to prepare baccalaureate degree graduates who have the necessary skills to plan, organize, staff, lead and exercise control in the directing and coordinating of resources to achieve construction project objectives. Therefore, the objective of the program is to produce graduates who have the technical grounding in construction processes for infrastructure and have managerial skills to plan and direct projects.

## Student Learning Outcomes

Students who successfully complete the CM program are expected to have the ability to:

- Apply knowledge, techniques, skills, and tools of the construction industry in construction activities;
- Select and apply knowledge of mathematics, science, and technology to construction problems;
- Perform standard tests, organize and interpret test data, and apply test results to improve construction processes;
- Function effectively as members or leaders on construction teams;
- Communicate effectively regarding subjects related to construction activities; and
- Demonstrate an understanding of professional and ethical responsibilities.


## Construction Management Curriculum

The CM curriculum consists of courses listed under the major categories listed below.

## Skills Component

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | :--- |
| ENG | 101 | Composition I................................. 3 |  |
| ENG | 102 | Composition II....................................... 3 |  |

TOTAL 6

## Knowledge Component

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| SPCOM 103 | Speaking and Listening.......................$~$ |  | 3

General Education: History ..... 3
General Education: Humanities. ..... 6
Social Sciences (6 hours listed under Business**)

$\qquad$
TOTAL 12
Math and Sciences

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | ---: |
| MATH | 121 | College Algebra ................................. 4 |  |
| MATH | 156 | Introduction to Statistics.................... 3 |  |
| CHEM | $111 /$ L | Principles of Chemistry/Lab |  |
|  |  | OR |  |
| GEOL | 101/L | Earth Science/Lab ............................... 4 |  |
| PHYS | 201/L | Principles of Physics/Lab................. 4 |  |

TOTAL 15
Business and Management

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| ACCTG | 201 | Principles of Financial Accounting ........ 3 |
| BUSAD | 270 | Business Communications ............... 3 |
| BUSAD | 302 | Ethics in Business.................................... |
| ECON | $201^{* *}$ | Principles of Macroeconomics ............ 3 |
| ECON | $202^{* *}$ | Principles of Microeconomics ............ 3 |
| MGMT | 201 | Principles of Management ............... 3 |

$$
\begin{array}{ll}
\hline \text { TOTAL } 18
\end{array}
$$

[^2]
## Introduction to Computers

| Courses |  | Titles | Credits |
| :--- | ---: | :--- | ---: |
| CIS | 100 | Introduction to Word and Windows...... 1 |  |
| CIS | 103 | PowerPoint \& Web Publishing .............. 1 |  |
| CIS | 104 | Excel Spreadsheets....................... 1 |  |

## TOTAL 3

## Major Courses

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| CET | 102 | Surveying I....................................... 3 |
| CET | 103 | Surveying II...................................... 3 |
| CET | 115 | Civil Drafting I.................................. 3 |
| CET | 207 | Construction Materials \& Methods ....... 3 |
| CET | 208 | Concrete and Asphalt Materials........... 3 |
| CET | 303 | Construction Management ................. 3 |
| CET | 304 | Building Cost Estimating.................... 3 |
| CET | 305 | Heavy/Highway Cost Estimating.......... 3 |
| CM | 101 | Intro to Construction Management ....... 2 |
| CM | 231 | Statics and Structures ....................... 4 |
| CM | 320 | Soils in Construction.......................... 3 |
| CM | 330 | Wood Structural Systems ................... 3 |
| CM | 341 | Concrete and Steel Structures............ 4 |
| CM | 351 | Construction Planning \& Scheduling .... 3 |
| CM | 445 | Construction Safety ........................... 2 |
| CM | 451 | Mechanical \& Electrical Systems......... 4 |
| CM | 461 | Construction Law.............................. 3 |
| CM | 465 | Construction Accounting \& Finance..... 3 |
| CM | 475 | Senior Project.................................. 3 |

TOTAL 58

## Technical and Management Electives

Select from ACCTG, BUSAD, CET, CM, EN, FIN,
MGMT or MKTG........................................................ 5
Upper Division Technical and Management Electives
Select from ACCTG, BUSAD, CET, CM, EN, FIN,
MGMT or MKTG.............................................................. 3
Total required credit hours

## Graduation Requirements

## Construction Management Program Requirements

- Students are required to complete an approved program of study with a cumulative GPA of 2.000 or better in the CM major courses.
- Students are required to demonstrate skills and knowledge in the areas of quantitative analysis and science by having a cumulative GPA of 2.000 or better in the required mathematics and physical science courses.
- Construction management majors are expected to demonstrate the ability to solve problems pertinent to the construction industry by completing a senior-year capstone activity that requires a packaged submittal and an oral presentation.


## Institutional and General Education Requirements

To complete the General Education requirements, students are required to take a total of 35 credit hours consisting of the skills and knowledge components as specified under the undergraduate General Education Requirements section of this catalog. Construction Management (CM) students will take 17 of the 35 credit hours of the general education requirements under the required math and physical science courses and the required business and management component.

Therefore, the CM majors are expected to take 18 credit hours to complete the remaining skills and knowledge components in Written Communication ( 6 credit hours), Humanities and Speech Communication (9 credit hours), and history ( 3 credit hours). Please refer to the undergraduate General Education Requirements section of this catalog for the list of courses that can be taken to fulfill the skills and knowledge components.

General Education Requirements in Written
Communication, Humanities, and History

## Outcomes Assessment Activities

- To be eligible for graduation, all construction management majors are required to take an exit examination. The results of the exit examination are used in the evaluation of the program but have no effect on the student's GPA.
- Graduates and their employers are surveyed on program satisfaction and job performance following their graduation.
- The CM Advisory Committee meets every year to review the three year cycle report and make suggestions for program improvement. The committee also meets with current CM students for an open discussion regarding the CM program.


## Co-curricular Activities

The CM faculty supports and encourages the involvement of construction management majors in at least one technical organization relevant to the construction enterprise.

## DEPARTMENT OF ENGINEERING

Department Chair: Jane M. Fraser

Faculty: Bedoya Valencia, DePalma, Fraser, Jaksic, Paudel, Sarper, Yuan

The Department of Engineering offers the following engineering programs:

- The Bachelor of Science in Engineering with a Mechatronics specialization (BSE-Mechatronics)
- The Bachelor of Science in Industrial Engineering (BSIE)
- The Master of Science in Engineering (MS)
- The Master of Science in Industrial and Systems Engineering (MS)
- The Pre Engineering program
- The Minor in Engineering
- The Minor in Industrial Engineering

The BSE-Mechatronics is a 4-year program that can be completed at CSU-Pueblo. The program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The BS in Engineering with specialization in mechatronics is a flexible, broad degree that prepares graduates to work in many industries. Mechatronics combines mechanical and electrical engineering with computers to create devices that make our lives better. Electrical and mechanical systems, controlled by computers, are at the core of a wide range of processes and products. Robots, the Mars Rover, a heartlung machine, a computer controlled telescope, and a nano-scale microscope are all examples of mechatronics.

The BSIE is a 4-year program that can be completed at CSU-Pueblo. The program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. As defined by the Institute of Industrial Engineers, "industrial engineering is concerned with the design, improvement and installation of integrated systems of people, materials, information, equipment, and energy. It draws upon specialized knowledge and skill in the mathematical and physical sciences, together with the principles and methods of engineering analysis and design, to specify, predict and evaluate the results to be obtained from such integrated systems." Industrial engineering is a major branch of engineering with applications in manufacturing, service, governmental, and non-profit organizations. Industrial engineers are productivity and quality specialists who deal with the human aspects of work in addition to the advanced technologies of computer software and production related hardware.

A student can receive the BSE-Mechatronics and BSIE degree simultaneously by taking 30 additional credit hours
over one degree alone, including a second senior design project.

For more information on the MS degree with a major in Industrial and Systems Engineering or the MS degree with a major in Engineering, see the Graduate Studies section of this catalog.

In the Pre-Engineering program, students seeking to major in some area of engineering other than industrial engineering or engineering with a mechatronics specialization (for example, civil, electrical, or mechanical engineering) can complete at least 60 credits that will transfer to other engineering schools.

The Department of Engineering has found that transfer students are very successful in our programs and we welcome transfer students. About half our graduates began their degrees at other institutions.

## BACHELOR OF SCIENCE IN ENGINEERING (BSE) WITH A MECHATRONICS SPECIALIZATION

The BSE program has the following educational objectives and outcomes, which have been approved and are reviewed regularly by the BSE Advisory Board.

## BSE-Mechatronics Program Outcomes

The BSE-Mechatronics program is designed so that students graduate from the program with the following abilities and knowledge:

- An ability to apply knowledge of mathematics, science, and engineering;
- An ability to design and conduct experiments, as well as to analyze and interpret data;
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;
- An ability to function on multi-disciplinary teams;
- An ability to identify, formulate, and solve engineering problems;
- An understanding of professional and ethical responsibility;
- An ability to communicate effectively;
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;
- A recognition of the need for, and an ability to engage in life-long learning;
- A knowledge of contemporary issues; and
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.


## BSE-Mechatronics Educational Objectives

During the first few years after graduation, BSEMechatronic graduates should be able:

- Conduct low-level designs and modifications of mechatronic systems;
- Trouble shoot and support existing mechatronic systems;
- Work directly with suppliers and customers of mechatronic systems;
- Manage small and support large engineering projects;
- Assume ownership and accountability for engineering projects;
- Function well on teams of engineers with different skill levels;
- Implement basic quality control principles;
- Write sound technical documents such as requests for proposals, grant applications, project specifications and technical reports;
- Continue their education at the graduate level; and
- Obtain additional engineering certifications.


## Specific Requirements for the BSE-Mechatronic Degree

Students are required to have earned a cumulative GPA of 2.000 or better in required EN courses.

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| EN | 101 | Introduction to Engineering................. 2 |
| EN | 103 | Problem Solving for Engineers ........... 3 |
| EN | 107 | Engineering Graphics ........................ 2 |
| EN | 211 | Engineering Mechanics I .................... 3 |
| EN | 212 | Engineering Mechanics II ................... 3 |
| EN | 231/L | Circuit Analysis I/Lab ......................... 5 |
| EN | 260 | Basic Electronics .............................. 2 |
| EN | 263 | Electromechanical Devices................. 3 |
| EN | 321 | Thermodynamics .............................. 3 |
| EN | 324/L | Materials Science and Engineering/Lab .. 4 |
| EN | 343 | Engineering Economy ....................... 3 |
| EN | 360/L | Control Systems I/Lab ....................... 3 |
| EN | 361/L | Digital Electronics/Lab ....................... 4 |
| EN | 362/L | Introduction to Mechatronics/Lab......... 3 |
| EN | 363/L | Virtual Machine Design/Lab................ 3 |
| EN | 365 | Stochastic Systems Engineering ......... 4 |
| EN | 430 | Project Planning and Control............... 3 |
| EN | 441/L | Engineering of Manufacturing <br> Processes/Lab. $\qquad$ |
| EN | 443 | Quality Control and Reliability............. 3 |
| EN | 460/L | Control Systems II/Lab ....................... 3 |
| EN | 462/L | Industrial Robotics/Lab ....................... 3 |
| EN | 473/L | Computer Integrated |
|  |  | Manufacturing/Lab............................ 3 |
| EN | 486 | Senior Seminar................................. 2 |
| EN | 487 | Engineering Design .......................... 3 |



## TOTAL 49

DEGREE TOTAL 129

Technical electives must be chosen from an approved list or have the approval of an Engineering advisor.

Typical Schedule of Courses for the BSEMechatronics Degree

## Freshman Year

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| EN | 101 | Introduction to Engineering................. 2 |
| EN | 103 | Problem Solving for Engineers ........... 3 |
| EN | 107 | Engineering Graphics ........................ 2 |
| ENG | 101 | Composition I................................... 3 |
| ENG | 102 | Composition II................................... 3 |
| MATH | 126 | Calculus \& Analytic Geometry I ........... 5 |
| MATH | 224 | Calculus \& Analytic Geometry II .......... 5 |
| PHYS | 221/L | General Physics I/Lab....................... 5 |
| General Education...................................................... 3 |  |  |
|  |  | TOTAL 31 |
| Sophomore Year |  |  |
| Courses |  | Titles Credits |
| EN | 211 | Engineering Mechanics I ................... 3 |
| EN | 212 | Engineering Mechanics II ................... 3 |
| EN | 231/L | Circuit Analysis I/Lab ......................... 5 |
| EN | 260 | Basic Electronics ............................. 2 |
| EN | 263 | Electromechanical Devices................. 3 |
| EN | 324/L | Materials Science and |
|  |  | Engineering/Lab................................ 4 |
| MATH | 207 | Matrix \& Vector Algebra with |
|  |  | Applications $\qquad$ 2 |

MATH 337 Differential Equations I ..... 3
PHYS 222/L General Physics II/Lab ..... 5
TOTAL ..... 30
Junior Year
Courses
EN 321 Thermodynamics ..... 3
EN 343 Engineering Economy ..... 3
EN 360/L Control Systems I/Lab ..... 3
EN 361/L Digital Electronics/Lab ..... 4
EN 362/L Introduction to Mechatronics/Lab. ..... 3
EN 363/L Virtual Machine Design/Lab ..... 3
EN 365 Stochastic Systems Engineering ..... 4
EN 441/L Engineering of Manufacturing Processes/Lab ..... 4
EN 443 Quality Control and Reliability ..... 3
EN 460/L Control Systems II/Lab ..... 3
TOTAL ..... 33
Senior Year
Courses Titles Credits
EN $430 \quad$ Project Planning and Control ..... 3
EN 462/L Industrial Robotics/Lab ..... 3
EN 473/L Computer Integrated Manufacturing/Lab ..... 3
EN 486 Senior Seminar. ..... 2
EN 487 Engineering Design ..... 3
Math/Science Electives ..... 3
Technical Electives ..... 3
SPCOM 103 Speaking and Listening ..... 3
General Education ..... 12
TOTAL 35
BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING (BSIE)

The BSIE program has the following educational objectives and outcomes, which have been approved and are reviewed regularly by the BSIE Advisory Board.

## BSIE Program Outcomes

The BSIE program is designed so that students graduate from the program with the following abilities and knowledge:

- An ability to apply knowledge of mathematics, science, and engineering;
- An ability to design and conduct experiments, as well as to analyze and interpret data;
- An ability to design a system, component, or process to meet desired needs within realistic constraints
such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;
- An ability to function on multi-disciplinary teams;
- An ability to identify, formulate, and solve engineering problems;
- An understanding of professional and ethical responsibility;
- An ability to communicate effectively;
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;
- A recognition of the need for, and an ability to engage in life-long learning;
- A knowledge of contemporary issues; and
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.


## BSIE Educational Objectives

During the first few years after graduation, BSIE graduates should be able to:

- Identify root causes of symptoms and fix problems in situations where data and resources may be lacking and multiple problems may exist;
- Function well on teams of engineers with different skill levels;
- Obtain jobs of increasing responsibility applying industrial engineering skills and knowledge to a wide range of problems in a wide range of industries;
- Continue their education, for example, in MS, PhD, and MBA programs;
- Obtain additional certifications, such as Professional Engineer, Six Sigma Black Belt, or Certified Manufacturing Engineer; and
- Achieve management positions.


## Specific Requirements for the BSIE Degree

Students are required to have earned a cumulative GPA of 2.000 or better in required EN courses.

| EN Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| EN | 101 | Introduction to Engineering.. | ........ 2 |
| EN | 103 | Problem Solving for Engineers | $\ldots . .3$ |
| EN | 107 | Engineering Graphics | 2 |
| EN | 211 | Engineering Mechanics I | 3 |
| EN | 212 | Engineering Mechanics II .... | $\ldots . .3$ |
| EN | 215 | Introduction to Industrial and Systems Engineering | 3 |
| EN | 231/L | Circuit Analysis I/Lab | 5 |
| EN | 321 | Thermodynamics | 3 |
| EN | 324/L | Materials Science \& Engineer | Lab ... 4 |
| EN | 343 | Engineering Economy.. | . 3 |
| EN | 365 | Stochastic Systems Engineerin | ......... 4 |
| EN | 420 | Simulation Experiments . | . 4 |

EN $430 \quad$ Project Planning and control................. 3
EN 439 Time and Motion Studies ....................... 2
EN 440 Safety Engineering ............................... 3
EN 441/L $\begin{array}{ll}\text { Engineering of Manufacturing } \\ & \text { Processes/Lab..................................... } 4\end{array}$
EN 443 Quality Control and Reliability............... 3
EN 471 Operations Research............................ 3
EN 473/L Computer Integrated Manufacturing/Lab ................................. 3
EN 475 Facility, Planning and Design ............... 3
EN 477 Operations Planning and Control.......... 3
EN 486 Senior Seminar..................................... 2
EN 488 Industrial Engineering Design................ 3
Math/Science Electives ...................................................... 3
Technical Electives ........................................................... 3
TOTAL 77

## Other Required Courses

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| MATH | 126 | Calculus \& Analytic Geometry | ....... 5 |
| MATH | 207 | Matrix \& Vector Algebra with |  |
|  |  | Applications | 2 |
| MATH | 224 | Calculus \& Analytic Geometry II | ....... 5 |
| MATH | 337 | Differential Equations I. | . 3 |
| PHYS | 221/L | General Physics I/Lab | .... 5 |
| PHYS | 222/L | General Physics II/Lab | . 5 |
| ENG | 101 | Composition I. |  |
| ENG | 102 | Composition II. | 3 |
| SPCOM | 103 | Speaking and Listening |  |
| General Education .................................................... 15 |  |  |  |
|  |  |  | TAL 49 |
| DEGREE TOTAL................................................... 126 |  |  |  |

Technical electives must be chosen from an approved list or have the approval of an Engineering advisor.

## Typical Schedule of Courses for the BSIE Degree

## Freshman Year

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| EN | 101 | Introduction to Engineering. |  |
| EN | 103 | Problem Solving for Engineers |  |
| EN | 107 | Engineering Graphics |  |
| ENG | 101 | Composition I. |  |
| ENG | 102 | Composition II. |  |
| MATH | 126 | Calculus \& Analytic Geometry | . 5 |
| MATH | 224 | Calculus \& Analytic Geometry II | ..... 5 |
| PHYS | 221/L | General Physics I/Lab ..... | .... 5 |
| General | Educa |  |  |

TOTAL 31

## Sophomore Year

| Courses | Titles | Credits |
| :--- | :--- | :--- | :--- |
| EN | 211 | Engineering Mechanics I ..................... 3 |

## Senior Year

|  |  | Titles Credits |
| :---: | :---: | :---: |
| EN | 430 | Project Planning and Control ............... 3 |
| EN | 440 | Safety Engineering |
| EN | 473/L | Computer Integrated <br> Manufacturing/Lab. |
| EN | 475 | Facility, Planning and Design .............. 3 |
| EN | 477 | Operations Planning and Control......... 3 |
| EN | 486 | Senior Seminar |
| EN | 488 | Industrial Engineering Design.. |

Technical Electives 3
General Education ..... 6

## PRE-ENGINEERING PROGRAM

Students seeking to major in some area of engineering other than mechatronics or industrial engineering (for example, civil, electrical, or mechanical engineering) can complete at least 60 credits (two years) of courses that will
transfer to other engineering schools. The courses should be selected in consultation with an Engineering faculty member and an advisor at the school to which the student plans to transfer. Generally recommended courses for a student planning to transfer to another engineering school include:

| Cours |  | Titles Credits |
| :---: | :---: | :---: |
| CHEM | 121/L | General Chemistry I/Lab..................... 5 |
| MATH | 126 | Calculus \& Analytic Geometry I ........... 5 |
| MATH | 224 | Calculus \& Analytic Geometry II .......... 5 |
| MATH | 337 | Differential Equations I ...................... 3 |
| PHYS | 221/L | General Physics I/Lab ....................... 5 |
| PHYS | 222/L | General Physics II/Lab ...................... 5 |
| EN | 103 | Problem Solving for Engineers ............ 3 |
| EN | 211 | Engineering Mechanics I .................... 3 |
| EN | 212 | Engineering Mechanics II ................... 3 |
| EN | 231/L | Circuit Analysis I/Lab ......................... 5 |
| EN | 321 | Thermodynamics .............................. 3 |
| EN | 324/L | Materials Science and |
|  |  | Engineering/Lab ............................... 4 |

Humanities, Social Sciences \& History courses
A student who intends to transfer elsewhere and then decides to stay at CSU-Pueblo will be able to count all of the above courses toward the BSE-Mechatronics or the BSIE.

## MINOR IN ENGINEERING

The Engineering minor is appropriate for students who want to add knowledge of engineering to their study of a technical field, such as chemistry, mathematics, or physics. The courses in the minor have prerequisites (calculus and physics) that are not listed below.

## Specific Requirements for the Minor in Engineering

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| EN | 101 | Introduction to Engineering.. |  |
| EN | 103 | Problem Solving for Engineers |  |
| EN | 107 | Engineering Graphics |  |
| EN | 211 | Engineering Mechanics I . | .... 3 |
| EN | 212 | Engineering Mechanics II | . 3 |
| EN | 231/L | Circuit Analysis I/Lab |  |
| EN | 321 | Thermodynamics. |  |
| EN | 343 | Engineering Economy | .... 3 |

## TOTAL <br> 24

## MINOR IN INDUSTRIAL ENGINEERING

The minor in Industrial Engineering is appropriate for students who want to add considerations of efficiency, quality, and safety to their study of a technical field, such as chemistry, mathematics, or physics. Some of the courses in the minor have prerequisites (calculus and physics) that are not listed below.

## Specific Requirements for the Minor in Industrial Engineering

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| EN | 101 | Introduction to Engineering |  |
| EN | 103 | Problem Solving for Engineers | ....... 3 |
| EN | 107 | Engineering Graphics . | 2 |
| EN | 215 | Introduction to Industrial and |  |
|  |  | Systems Engineering.......... | ....... 3 |
| EN | 343 | Engineering Economy... | ..... 3 |

PLUS three of the following:

| EN | 420 | Simulation Experiments |
| :---: | :---: | :---: |
| EN | 439 | Time and Motion Studies |
| EN | 440 | Safety Engineering |
| EN | 441/L | Engineering of Manufacturing <br> Processes/Lab ....................................... 4 |
| EN | 443 | Quality Control and Reliability. |
| EN | 471 | Operations Research. |
| EN | 473/L | Computer Integrated <br> Manufacturing/Lab. |
| EN | 475 | Facility, Planning and Design .............. 3 |
| EN | 477 | Operations Planning and Control. |

$$
\begin{array}{ll}
\hline \text { TOTAL } \quad 21-24
\end{array}
$$

## Outcomes Assessment Activities

The BSE-Mechatronics and BSIE programs and the courses in each program are designed to support the Program Outcomes listed for each degree. Each program has an Advisory Board that meets annually and the input from those Boards is used to revise the programs. The Department also uses the following assessment activities:

- During the final term of study, all engineering students are required to demonstrate their ability to apply and integrate the skills and knowledge learned in the program by producing a capstone engineering design project. This project must incorporate subject material covered in two or more courses in the student's major, involve knowledge or skill not learned in a class thus demonstrating the student's ability to engage in life long learning, involve reflection on the impact of the proposed solution in a global and societal context, and be presented in written and oral reports to demonstrate the student's communication skills.
- All senior engineering studies are encouraged to take the Fundamentals of Engineering (FE) exam administered by the Colorado State Board of Registration for Professional Engineers. The Department periodically sets goals for and reviews the section-by-section performance of students on the FE. The results are used to identify areas of the curriculum that may need improvement.


# EXERCISE SCIENCE, HEALTH PROMOTION, AND RECREATION DEPARTMENT 

Department Chair: Carol Foust

Faculty: Ball, L. Clark, R. Clark, Conroy, Dallam, Hostetter, Marley, McClaran, Rochester

The mission of the Department of Exercise Science, Health Promotion, and Recreation is to prepare students for professional positions and leadership roles in Athletic Training and Exercise Science, Health Promotion, and Recreation through experiential educational opportunities that promote wellness and healthy lifestyles. The EXHPR department awards two degrees:

- A Bachelor of Science degree in Athletic Training (AT) Or
- A Bachelor of Science degree in Exercise Science, Health Promotion, and Recreation (EXHPR). The BS in Exercise Science, Health Promotion, and Recreation (EXHPR) program currently includes five emphasis of study:
- General Exercise Science
- Health Promotion/Wellness
- Physical Education K-12 Teacher Preparation
- Community/Commercial Recreation
- Outdoor Leadership


## Department Vision

The EXHPR Department's vision is to provide students with a broad-based theoretical foundation supported by laboratory and field experiences that allow individual observations, inferences, and hands-on mastery of skills related to the promotion of wellness and healthy lifestyles. This vision is accomplished by creating effective professional learning opportunities based on the following conceptual hierarchy of learning skills: Information Retrieval, Conceptual Understanding, Information Analysis, Critical Thinking, Development of Relevant Skill, and Practical Application of Ideas. In so doing we prepare student to become productive, accountable, ethical, and responsible professionals.

## General Requirements

All departmental Majors are required to:

- Complete an EXHPR emphasis of study with a cumulative GPA of 2.50 or higher or the Athletic Training major with a cumulative GPA of 2.75 or higher;
- Earn a 2.0 overall GPA to enroll in 300 or 400 level courses in the department;
- Earn a minimum grade of a " $C$ " in all prerequisite and major courses;
- Repeat prerequisite and major courses with a grade of " $D$ " or lower until a grade of "C" or higher is achieved; and
- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.


## ATHLETIC TRAINING

http://ceeps.colostate-
pueblo.edu/EXHPR/AthleticTraining/Pages/default.aspx

## Student Learning Outcomes

Athletic Training major graduates will be able to demonstrate:

- Evidence-based practice.
- Prevention and health promotion.
- Clinical examination and diagnosis.
- Acute care of injury and illness.
- Therapeutic interventions.
- Psychosocial strategies and referral.
- Health care Administration.
- Professional development and responsibility.

The student outcomes are measured and assessed through several techniques:

- Direct measure through the Board of Certification (BOC) examination which assesses the proficiency of each of the previous listed student outcome areas.
- Indirect measure through graduate, alumni and employer surveys.


## Specific Requirements for the Athletic Training Major

## Core Course Requirements for Athletic Training

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| AT | 101 | Introduction to Athletic Training ................ 2 |
| BIOL | 112 | Nutrition ............................................ 3 |
| EXHP | 162 | Personal Health............................... 3 |
| EXHP | 162 L | Personal Health Lab....................... 1 |
| EXHP | 222 | Behavior Facilitation .................................. 3 |
| EXHP | 343 | Measurement and Evaluation.............. 3 |
| EXHP | 344 | Exercise Physiology ........................... 3 |
| EXHP | 344 L | Exercise Physiology Lab .................... 1 |
| EXHP | 364 | Kinesiology ............................................ 3 |
| AT | 443 | Administration in Athletic Training ........ 3 |

TOTAL 25

## Required Major Courses

Courses Titles Credits

AT 232 First Aid ................................................ 2
AT 233 CPR/AED for the Professional Rescuer .. 1
AT 260 Care and Prevention of Athletic Injuries .3
AT 279 Practicum in Athletic Training I ............. 2
AT 323 Functional Exercise Training ................ 2
AT 330 Lower Extremity Evaluation .................. 3
AT 331 Upper Extremity Evaluation .................. 3
AT 332 Head, Neck and Spine Evaluation........ 3
AT 339 Clinical Pathology \& Assessment ......... 3
AT 379 Practicum in Athletic Training II ............ 1
AT 389 Practicum in Athletic Training III ........... 1
AT 419 Athletic Training Field Experience ........ 8
AT 430 Therapeutic Modalities ......................... 3
AT 431 Therapeutic Exercise............................ 3
AT 479 Practicum in Athletic Training IV........... 1
AT 489 Practicum in Athletic Training V............ 1
AT 488 BOC Test Prep ..................................... 1
TOTAL 41

## Other Required Courses

| Courses | Titles | Credits |
| :--- | :--- | :--- | :--- |
| BIOL | 223 | Human Physiology \& Anatomy I .......... 3 |

## Accreditation

The Colorado State University-Pueblo Athletic Training Education Program is accredited by the Commission on Accreditation of Athletic Training Education (C.A.A.T.E.).

## Competitive Admission Policy

The Athletic Training Education Program is highly competitive. Entry into the upper division courses and the clinical portion of the curriculum is not guaranteed upon completion of the pre-professional phase (the first two years of coursework). The determining factors include the success of the pre-professional experience, meeting all academic prerequisites, and number of students enrolled in the program. The number of students admitted into the program varies from year to year.

## Application Criteria/Procedure

The following criteria must be met to be considered for admission into the upper division courses and the clinical portion of the Colorado State University-Pueblo Athletic Training Education Program (ATEP)

- Completion of the Colorado State University-Pueblo Athletic Training Education Application. The student can obtain the application form from the program director. Completed applications are due to the program director by March 1st;
- Completion of AT 101, 232, 233, 260, 279, BIOL 223, 223L and BIOL 224, 224L. (AT 101, 232, 233, 260 and 279 with a B or higher, all others with a $C$ or higher grade);
- An overall grade point average of 2.75 or higher;
- A declared Athletic Training major;
- Proof of current Red Cross First Aid and CPR/AED for the Professional Rescuer Certification;
- Letter of recommendation from a BOC-Certified Athletic Trainer;
- Complete interview with ATEP Director, faculty, and clinical Instructors; and
- NATA membership is highly recommended but not required.

The Athletic Training Education Program faculty/staff will make the final decisions regarding acceptance into the upper division courses and the clinical portion of the program based upon the student's total rankings on the admission criteria and available slots in the program. All applying students will receive written notification from the program director indicating their acceptance or denial into the upper division courses and clinical portion of the Athletic Training Education Program.

## Transfer Students

Students wishing to transfer to the Colorado State University-Pueblo Athletic Training Education Program must satisfy the above criteria. According to accreditation guidelines any courses containing competency or proficiency evaluation cannot be accepted as transfer credits, unless an affiliate site agreement exists between the institution and CSU-Pueblo. Transfer students must
understand that application to the upper division courses and the clinical portion of the athletic training education program occurs once a year during the spring semester only. Once accepted into the upper division courses and the clinical portion of the program students must complete 4 terms in order to be eligible for graduation.

## Requirements upon Program Acceptance

The following are required at the student's expense:

- Completion of program approved physical exam;
- Completion of the program's Technical Standards Form;
- Completion of a yearly Tuberculosis skin test and Hepatitis B vaccination and documentation or Hepatitis B declination form;
- Purchase of athletic training student liability insurance;
- Proof of medical insurance;
- Completion of "Background Check" will be required prior to going to any affiliated sites for clinical experience; and
- The athletic training student will need their own personal transportation for travel to get to off-campus clinical sites.


## Retention Criteria

In order to remain in the Athletic Training Education Program the student must:

- Maintain a 2.75 or higher overall GPA;
- Earn grades of no less than a B in all Athletic Training (AT) courses;
- Maintain athletic training student liability insurance; and
- Maintain Red Cross First Aid and CPR/AED for the Professional Rescuer Certification.


## Outcome Assessment Activities for Athletic Training

In addition to assessment, which is inherent in the core/major requirements, prior to receiving clearance for graduation, each Athletic Training major must complete:

- Departmental exit survey and alumni surveys,
- All NATA educational competencies and proficiencies,
- Practicum and fieldwork evaluations,
- Employer surveys, and
- An exit comprehensive examination and assessment of the pass rate for the Board of Certification (BOC) exam if taken.


## EXERCISE SCIENCE, HEALTH PROMOTION AND RECREATION

http://ceeps.colostate-pueblo.edu/EXHPR/Pages/default.aspx
The BS degree in EXHPR prepares program graduates for professional positions in worksite, clinical, school, fitness government and community settings.

- Graduates of the General Exercise Science coursework are prepared for exercise and fitness related professional positions. This emphasis is an excellent selection for students preparing for advanced study in fields such as exercise physiology, allied health, or sport administration.
- Graduates of the Health Promotion/Wellness emphasis are eligible to sit for the National Commission for Health Education Credentialing exam to become a Certified Health Education Specialist. Health Promotion/Wellness graduates can find employment in worksite health promotion, community health, government and volunteer health agencies, clinical and managed care settings.
- Graduates of the Physical Education K-12 Teacher Preparation emphasis who also complete the Teacher Education program, and receive a passing score on the Colorado Department of Education P.L.A.C.E. test are eligible to receive Teacher Licensure in the State of Colorado. Licensed graduates can find physical education teaching positions in both the public and private school settings.


## Student Learning Outcomes

General Exercise Science, Health Promotion, Physical Education, and Recreation students will:

- Possess content knowledge and skills necessary for their perspective fields of study;
- Exhibit the ability to read and interpret scientific research with application of the scientific methods, statistics, study design, and reporting;
- Evaluate and integrate critical concepts and skills acquired in the EXHPR program to common professional problems in the fields of interest;
- Exhibit effective oral and written communication regarding subjects related to EXHPR in an individual and group setting; and
- Apply and demonstrate knowledge, skills and critical problem solving in a field-based setting.


## Assessment of EXHPR Student/Program Outcomes

The student outcomes are measured and assessed through several techniques:

- End of program case study assessment and end of program examination;
- Fieldwork, internship and student teaching portfolios and projects;
- Internship and student teaching site supervisor evaluations;
- Student exit surveys; and
- Employer surveys and Advisory Committee

End of program exams will be, or will be representative of, the professional certification exams in each emphasis area. Case study questions will be developed by the faculty and EXHPR Advisory Committee (made up of professionals in the EXHPR field). The end of program exam will be completed during an appropriate field based course at the end of the course of study but before graduation. The EXHPR curriculum map details the specific types of assessments used in the capstone and experiential end of program courses to assess the Program's Student Outcomes.

Upon completion of the EXHP core program requirements, students will be eligible to sit for a variety of nationally recognized certification exams including those offered by the American College of Sports Medicine ("Health/Fitness Instructor", "Personal Trainer", and Exercise Leader"), the American Council on Exercise ("Personal Trainer", and "Aerobics Instructor"), the Aerobics and Fitness Association of America ("Personal Trainer", and "Aerobics Instructor"), the National Strength and Conditioning Association ("Certified Strength and Conditioning Specialist").

## Specific Requirements for the Exercise Science, Health Promotion Emphases:

- General Exercise Science
- Health Promotion/Wellness
- Physical Education K-12 Teacher Preparation


## Core Course Requirements for EXHP Emphasis Areas

Courses Titles Credits

EXHP 101 Introduction to EXHPR .......................... 2
BIOL 112 Nutrition............................................... 3
EXHP 162 Personal Health.................................... 3
EXHP 162L Personal Health Lab ............................. 1
EXHP 222 Behavior Facilitation .............................. 3
AT 232 First Aid ................................................ 2
EXHP 343 Measurement and Evaluation ............... 3
EXHP 344 Exercise Physiology ............................. 3
EXHP 344L Exercise Physiology Lab ...................... 1
EXHP 364 Kinesiology .......................................... 3
EXHP 461 Managing Programs in EXHPR ............ 3

TOTAL 27

| Emphasis Area Course Requirements |  |  |
| :---: | :---: | :---: |
| GENERAL EXERCISE SCIENCE |  |  |
| Required Core Courses............................................ 27 |  |  |
| Required Emphasis Courses |  |  |
| Courses |  | Titles Credits |
| EXHP | 201 | Drugs and Healthy Lifestyles ............... 3 |
| AT | 260 | Care and Prevention of Athletic Injuries.. 3 |
| EXHP | 436 | Exercise Assessment ......................... 3 |
| EXHP | 494 | Field Experience ................................ 6 |
|  |  | OR |
| EXHP | 498 | Internship...................................... 12 |
| The choice of Internship or Fieldwork in the above area will determine the hours in area below. |  |  |
| 13-19 credits from the following with a minimum of 4-10 upper division: |  |  |
| REC | 100L | Wilderness Technical Skills ................. 1 |
| REC | 102 | Mountain Orientation ......................... 2 |
| REC | 103 | Winter Orientation............................. 2 |
| REC | 104 | Desert Orientation............................. 2 |
| REC | 105 | Canyon Orientation............................ 2 |
| EXHP | 103L | Triathlon.......................................... 1 |
| EXHP | 105L | Snow Sports .................................... 1 |
| EXHP | 106L | Martial Arts and Self-Defense.............. 1 |
| EXHP | 108L | Yoga .............................................. 1 |
| EXHP | 109L | Volleyball ......................................... 1 |
| EXHP | 110L | Weight Training................................. 1 |
| EXHP | 111 | Commitment to Academic Excellence .. 1 |
| REC | 112L | Rock Climbing .................................. 1 |
| REC | 113L | Whitewater Boating........................... 1 |
| REC | 114L | Basic Mountaineering Techniques....... 1 |
| REC | 116L | Camping ......................................... 1 |
| REC | 117L | Backpacking .................................... 1 |
| EXHP | 118L | Jogging ........................................... 1 |
| EXHP | 120L | Aerobics.......................................... 1 |
| EXHP | 123L | Zumba ............................................ 1 |
| EXHP | 124L | Tai Chi ............................................ 1 |
| EXHP | 175L | Racquetball..................................... 1 |
| EXHP | 176L | Life Guard Training........................... 2 |
| PSYCH | 205 | Intro to Sports Psychology .................. 3 |
| EXHP | 205L | Snow Sports II .................................. 1 |
| EXHP | 208L | Yoga II ............................................ 1 |
| EXHP | 233 | History and Principles of Physical <br> Education and Recreation $\qquad$ |
| REC | 240 | Recreation Program Design ................ 3 |
| EXHP | 243 | Methods of Rhythmic Activities ............ 2 |
| EXHP | 245 | Motor Learning and Development........ 3 |
| REC | 249 | Challenge Course Leadership ............. 2 |
| REC | 270 | Outdoor Leadership I......................... 2 |
| AT | 279 | Practicum in Athletic Training I ............ 2 |
| EXHP | 288 | Health Promotion Practicum ............... 3 |
| EXHP | 301 | Dartfish Training ............................... 1 |


| REC | 322 | Wilderness First Aid.......................... 2 |
| :---: | :---: | :---: |
| AT | 323 | Functional Exercise Training .............. 2 |
| EXHP | 345 |  |
|  |  | Games I.......................................... 2 |
| EXHP | 346 |  |
|  |  | Games II......................................... 2 |
| EXHP | 347 | Methods of Fitness Instruction............ 1 |
| EXHP | 348 | Methods of Individual and Dual Sports .. 3 |
| REC | 350 | Leadership and Ethics ....................... 3 |
| REC | 360 | Outdoor Education............................ 3 |
| REC | 375 | Research and Evaluation of |
| EXHP | 382 | Lifestyle Disease Risk Reduction ........ 3 |
| EXHP | 432 | Applied Sport \& Exercise Psychology... 3 |
| EXHP | 464 | Adapted Physical Education............... 3 |
| EXHP | 470 | Methods of Coaching......................... 3 |
| EXHP | 472 | Coaching and Officiating Basketball ..... 2 |
| EXHP | 475 | Coaching and Officiating Volleyball ...... 2 |
| EXHP | 482 | Coaching and Officiating Wrestling...... 2 |
| EXHP | 483 | Coaching and Officiating Baseball........ 2 |
| EXHP | 484 | Coaching and Officiating Soccer ......... 2 |
| REC | 485 | Recreation Facility Design/ |
|  |  | Management..................................... 3 |
| EXHP | 492 | Research .......................................1-3 |
|  |  | TOTAL 34 |
| Other Required Courses |  |  |
| Courses |  | Titles Credits |
| BIOL | 223 | Human Physiology \& Anatomy I .......... 3 |
| BIOL | 223L | Human Physiology \& Anatomy I Lab ... 1 |
| BIOL | 224 | Human Physiology \& Anatomy II ......... 3 |
| BIOL | 224L | Human Physiology \& Anatomy II Lab ... 1 |
| CIS | 100 | Intro to Word and Windows ................ 1 |
| CIS | 103 | PowerPoint and Web Publishing ......... 1 |
| CIS | 104 | Excel Spreadsheets.......................... 1 |
| ENG | 101 | Composition I.................................... 3 |
| ENG | 102 | Composition II................................... 3 |
| MATH | 121 | College Algebra ............................... 4 |
| PSYCH | 151 | Human Development......................... 3 |
|  |  | OR |
| PSYCH | 100 | General Psychology .......................... 3 |
| SPCOM | 103 | Speaking and Listening ...................... 3 |
| General Education: History ........................................ 3 |  |  |
| General Education: Humanities ................................... 6 |  |  |
| General Educati |  | n: Social Science ............................... 3 |
|  |  | TOTAL 39 |
| Courses Outside the Major $\qquad$ 20 (Must include 8 upper division hours if 19 were taken in emphasis.) |  |  |

120

## HEALTH PROMOTION/WELLNESS

## Course Requirements for Health Promotion/Wellness Emphasis

Required EXHP Core Courses ..... 27

## Required Emphasis Courses

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| EXHP | 201 | Drugs and Healthy Lifestyles ............... 3 |
| EXHP | 288 | Health Promotion Practicum ............... 3 |
| EXHP | 336 | Community Health ............................. 3 |
| EXHP | 362 | Evaluation of Current Health Issues ..... 2 |
| EXHP | 382 | Lifestyle Disease Risk Reduction......... 3 |
| EXHP | 436 | Exercise Assessment ........................ 3 |
| EXHP | 485 | Methods in Health Promotion .............. 3 |
| EXHP | 487 | Health Promotion Program |
|  |  | Planning/Evaluation ........................... 4 |
| EXHP | 498 | Internship....................................... 12 |
| MCCNM | 210 | Intro to Integrated Communication........ 3 |
|  |  | OR |
| MKTG | 340 | Principles of Marketing ...................... 3 |

TOTAL 39

| Other Required Courses |  |  |
| :--- | :--- | :--- |
| Courses |  | Titles |$\quad$| Credits |
| :--- |

## PHYSICAL EDUCATION K-12 TEACHER PREPARATION

Students in the Physical Education Teacher Education Program (K-12) will be able to:

- Meet Colorado State University-Pueblo Teacher Education Goals and Beginning Physical Education Teacher Standards (in the areas of knowledge, dispositions, and performance). See links for detail: http://ceeps.colostatepueblo.edu/TEP/StandardsAndG oals/Pages/default.aspx.
- Be prepared to develop safety plans, teach and adapt lessons in a progressive manner, and meet the needs of diverse learners in the following activities: 1) Rhythmic Activities, 2) Tumbling, 3) Individual Sports,

4) Dual Sports, 5) Team Sports, 6) Fitness Education, 7) Adventure education, and 8) Team Sports.

## Course Requirements for Physical Education K-12 Teacher Preparation Emphasis

Required EXHP Core Courses. 27

## Required Emphasis Courses

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| AT | 260 | Care \& Prevention of Athletic |
|  |  | Injuries ............................................. 3 |
| EXHP | 233 | History and Principles of Physical |
|  |  | Education and Recreation .................. 2 |
| EXHP | 243 | Methods of Rhythmic Activities............ 2 |
| EXHP | 245 | Motor Learning and Development ........ 3 |
| EXHP | 345 | Methods of Physical Activities |
|  |  | \& Games I........................................ 2 |
| EXHP | 346 | Methods Physical Activities |
|  |  | \& Games II....................................... 2 |
| EXHP | 347 | Methods of Fitness Instruction............ 1 |
| EXHP | 348 | Methods of Individual and Dual |
|  |  | Sports ............................................. 3 |
| EXHP | 351 | Methods of Teaching Elementary |
|  |  | Physical Ed...................................... 3 |
| EXHP | 470 | Methods of Coaching........................ 3 |
| EXHP | 478 | Methods of Teaching Secondary |
|  |  | Physical Education ........................... 3 |
| Two credits from the following: |  |  |
| EXHP | 105L | Snow Sports ..................................... 1 |
| REC | 102 | Mountain Orientation ......................... 2 |
| REC | 103 | Winter Orientation............................. 2 |
| REC | 104 | Desert Orientation ........................... 2 |
| REC | 105 | Canyon Orientation........................... 2 |
| REC | 112L | Rock Climbing .................................. 1 |
| REC | 113L | Whitewater Boating ........................... 1 |
| REC | 114L | Basic Mountaineering Techniques....... 1 |
| REC | 116L | Camping ........................................ 1 |
| REC | 117L | Backpacking .................................... 1 |
| EXHP | 205L | Snow Sports II .................................. 1 |
| REC | 249 | Challenge Course Leadership ............. 2 |

One credit from the following:
EXHP 103L Triathlon. ..... 1
EXHP 104L Personal Fitness ..... 1
EXHP 106L Martial Arts and Self-Defense ..... 1
EXHP 108L Yoga ..... 1
EXHP 109L Volleyball ..... 1
EXHP 110L Weight Training. ..... 1
EXHP 119L Walking for Fitness ..... 1
EXHP 120L Aerobics. ..... 1
EXHP 121L Aerobic Instructor Training .....  .1
EXHP 123L Zumba .....
EXHP 124L Tai Chi ..... 1
EXHP 174L Tennis. ..... 1
EXHP 175L Racquetball ..... 1
EXHP 208L Yoga II ..... 1
One credit from the following:

- 146L Beginning Swimming ..... 1
EXHP 176L Life Guard Training ..... 2
EXHP 246L Methods of Swimming .....  .1
EXHP 276L Water Safety Instructor Certification ..... 2
TOTAL ..... 31
Other Required Courses

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| BIOL | 223 | Human Physiology \& Anatomy I .......... 3 |
| BIOL | 223 L | Human Physiology \& Anatomy I Lab .... 1 |
| ED | 202 | Foundation of Education.................... 3 |
| ED | 280 | Educational Media and Technology ...... 3 |
| ED | 301 | Frameworks of Teaching .................... 3 |
| ED | 485 | Capstone Seminar in Education .......... 2 |
| ED | 489 | Student Teaching K-12 .................... 12 |
| ENG | 101 | Composition I................................... 3 |
| ENG | 102 | Composition II.................................. 3 |
| EXHP | 465 | Adapted Physical Education ................ 3 |
|  |  | OR |
| ED | 412 | Teaching Diverse Learners................. 3 |
| MATH | 121 | College Algebra ................................ 4 |
| PSYCH | 151 | Human Development......................... 3 |
|  |  | OR |
| PSYCH | 251 | Childhood and Adolescence |
|  |  | OR |
| PSYCH | 342 | Educational Psychology |
| RDG | 435 | Content Area Literacy ........................ 4 |
|  |  |  |

Speaking and Listening ..... 3
General Education: History ..... 3
General Education: Humanities .....  6
General Education: Social Science .....  3
(providing either PSYCH 151 or 251 was taken above)
TOTAL 62
Total credit hours ..... 120

Please see the Teacher Education Program section of this catalog for admission to the Teacher Education Program.

## RECREATION

The Recreation program consists of two emphases of study:

- Community/Commercial
- Outdoor Leadership

Completion of both emphases of study prepares graduates to work in positions of leadership in a variety of recreational service agencies. Prospective employers include parks and recreation departments at the city, county, district, and state levels as well as voluntary youth agencies such as the YWCA/YMCA, boys' and girls' clubs and scouting. Other areas of employment include recreation programs in the military, hospital, commercial, and worksite settings. Students completing the Community/Commercial emphasis are eligible to sit for the Certified Park and Recreation Professional (CPRP) and after completing two additional courses, the Certified Therapeutic Recreation Specialist (CTRS) Certification Exams.

## Specific Requirements for the Recreation Emphases

## Core Course Requirements for the Recreation Emphases

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| EXHP | 101 | Introduction to EXHPR |  |
| REC | 240 | Recreation Program Design |  |
| REC | 280 | Foundations of Therapeutic |  |
|  |  | Recreation |  |
| REC | 350 | Leadership and Ethics | 3 |
| REC | 360 | Outdoor Education. | . 3 |
| REC | 375 | Research and Evaluation of Recreation |  |
| EXHP | 461 | Managing Programs in EXHPR | ... 3 |
| REC | 493 | Seminar. | 2 |
| REC | 498 | Internship. | . 12 |
|  |  | OR |  |
| REC | 489 | Internship in Therapeutic Rec.. | ...... 12 |

TOTAL 34

## Emphasis Course Requirements

## OUTDOOR LEADERSHIP

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| Required Recreation Core Courses ................................ 34 |  |  |

Required Recreation Core Courses ..... 34
Four credits from the following: ..... 4
REC 112L Rock Climbing ..... 1
REC 113L Whitwater Boating1
REC 116L Camping1
EXHP 205L Snow Sports II ..... 1
Twenty-one credits from the following: ..... 21
REC 100L Wilderness Technical Skills ..... 1
REC 102 Mountain Orientation ..... 2
REC 104 Desert Orientation ..... 2
REC 103 Winter OrientationOR
REC 105 Canyon Orientation. ..... 2
REC 249 Challenge Course Leadership ..... 2
REC 270 Outdoor Leadership I .....  2
REC 322 Wilderness First Aid. .....  2
REC 370 Outdoor Leadership II ..... 2
REC 388 Outdoor Leadership Practicum ..... 3
REC 484 Outdoor Resources andManagement3
TOTAL 59
Hours Outside the Major ..... 20
(at least 4 upper division credits)
Elective Courses
$\qquad$6
(CIS 100, 103, \& 104 recommended. Take 3 additionalcredits if CIS 100-104 is taken. EXHP 176L is alsorecommended.)
General Education Requirements ..... 35
Courses Titles Credits
ENG 101 Composition 1 ..... 3
ENG 102 Composition II. ..... 3
MATH ..... 3
Social Sciences ..... 6
Humanities ..... 6
SPCOM 103 Speaking and Listening ..... 3
History ..... 3
Natural and Physical Science. .....  8
Total credit hours ..... 120

## WILDERNESS EDUCATION LEADERSHIP PROGRAM

An integral component of the Outdoor Pursuits program is our affiliated Wilderness Education Association (WEA) program. We utilize the eighteen-point curriculum of WEA in our academic courses as well as a framework with our recreation adventures. Students who participate in Outdoor Pursuits have the opportunity to be certified through the Wilderness Education Association as an outdoor leader. This process requires the student to take specific outdoor adventure education courses at CSUPueblo, go on at least five extended trips, be a Wilderness First Responder, and lead at least two trips as a student leader.

## COMMUNITY COMMERCIAL RECREATION

Courses Titles Credits
Required Recreation Core Courses ..... 34
REC 250 Commercial Recreation and Tourism ..... 3
REC 389 Community/Commercial Rec Practicum ..... 3
REC 485 Recreation Facility Design/ Management ..... 3
MCCNM 210 Intro to Integrated Communication ..... 3
MGMT 201 Principles of Management. ..... 3
MGMT 318 Human Resource Management ..... 3
MKTG 340 Principles of Marketing ..... 3
MKTG 342 Promotional Strategy ..... 3
OR
MKTG 345 Retail Management ..... 3
OR
MKTG 348 Consumer Behavior. ..... 3
TOTAL ..... 58
Hours Outside the Major ..... 20
(at least 4 upper division credits)
Elective Courses ..... 7
(CIS 100, 103, \& 104 recommended. Take 4 additional credits if CIS 100-104 is taken. Also recommended are AT 232 and EXHP 176L.)
General Education Requirements. ..... 35
Courses Titles Credits
ENG 101 Composition 1 ..... 3
ENG 102 Composition II ..... 3
MATH ..... 3
Social Sciences ..... 6
Humanities ..... 6
SPCOM 103 Speaking and Listening ..... 3
History ..... 3
Natural and Physical Science ..... 8
Total credit hours ..... 120

## EXHPR MINORS

Five minors are available in Exercise Science, Health Promotion and Recreation:

- The Exercise Science and Health Promotion minor is available to all non-EXHP majors. This minor is ideal for Biology majors in the pre-physical therapy, premedicine, or pre-chiropractic emphasis areas of study or any student interested in Exercise Science and Health Promotion.
- The Coaching minor is available to all students and is a great choice for students aspiring to coach.
- The Outdoor Physical Education minor is for students who want to teach adventure education, outdoor skills and lead trips within the structure of K-12 schools and other educational settings.
- The Recreation minor is available to all non-REC majors. The minor is ideal for those majoring in EXHPR, social work, sociology, and biology as well as for students aspiring to teach in public/private schools.
- The Fitness and Recreational Sports Management minor is ideal for business students, community/ commercial recreation students or any student interested in managing fitness and recreational sports facilities.

EXHPR minors will:

- Complete the credit hour requirement of the minor;
- Complete all required coursework with a cumulative GPA of 2.5 or higher;
- Earn a minimum grade of a " $C$ " in all minor courses;
- Repeat minor courses with a grade of "D" or lower until a grade of " $C$ " or higher is achieved;
- Possess content knowledge and skills necessary for their perspective fields of study;
- Evaluate and integrate critical concepts and skills acquired in the EXHPR program to common professional problems in the fields of interest; and
- Exhibit effective oral and written communication regarding subjects related to EXHPR in an individual and group setting.


## Coaching

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| BIOL | 112 | Nutrition ................................................. 3 |

TOTAL 20

## Exercise Science and Health Promotion (for Non-EXHPR Majors)

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| EXHP | 101 | Introduction to EXHPR | . 2 |
| BIOL | 112 | Nutrition | 3 |
| EXHP | 162 | Personal Health. | . 3 |
| EXHP | 162L | Personal Health Lab | 1 |
| Two credits from the following list................................. 2 |  |  |  |
| REC | 102 | Mountain Orientation. |  |
| REC | 103 | Winter Orientation... | 2 |


| REC | 104 | Desert Orientation ......................... 2 |
| :---: | :---: | :---: |
| EXHP | 106L | Martial Arts and Self-Defense ........ 1 |
| EXHP | 108L | Yoga |
| EXHP | 109L | Volleyball.................................... 1 |
| EXHP | 110L | Weight Training ............................ 1 |
| REC | 112L | Rock Climbing ............................. 1 |
| REC | 113L | Whitewater Boating ...................... 1 |
| REC | 114L | Basic Mountaineering Techniques .. 1 |
| REC | 116L | Camping..................................... 1 |
| REC | 117L | Backpacking................................ 1 |
| EXHP | 119L | Walking for Fitness ....................... 1 |
| EXHP | 120L | Aerobics ..................................... 1 |
| EXHP | 123L | Zumba ....................................... 1 |
| EXHP | 174L | Tennis ........................................ 1 |
| EXHP | 175L | Racquetball ................................. 1 |
| EXHP | 176L | Life Guard Training....................... 1 |
| EXHP | 205L | Snow Sports II............................. 1 |
| EXHP | 208L | Yoga II....................................... 1 |
| EXHP | 300 or higher level student electives. |  |
|  |  | TOTAL 20 |
| Outdoor Physical Education |  |  |
| REC | 100L | Wilderness Technical Skills |
| REC | 249 | Challenge Course Leadership |
| REC | 270 | Outdoor Leadership I. |
| REC | 322 | Wilderness First Aid |
|  |  | OR |
| EXHP | 176L | Life Guard Training. |
| REC | 360 | Outdoor Education .............................. 3 |
| Choose one of the following: |  |  |
| REC | 102* | Mountain Orientation .................... 2 |
| REC | 103 | Winter Orientation ........................ 2 |
| REC | 104 | Desert Orientation ........................ 2 |
| REC | 105 | Canyon Orientation ...................... 2 |
| Six additional credit hours from the following: ........... 6 |  |  |
| EXHP | 105L | Snow Sports ................................ 1 |
| REC | 112L | Rock Climbing .............................. 1 |
| REC | 113L | Whitewater Boating ...................... 1 |
| REC | 117L | Backpacking................................ 1 |
| EXHP | 205L | Snow Sports II............................. 1 |
| EXHP | 276L | Water Safety Instructor |
|  |  | Certification ................................. 2 |
| REC | 114L | Basic Mountaineering Techniques .. 1 |
| REC | 350 | Leadership and Ethics................... 3 |
| REC | 484 | Outdoor Resources and |
|  |  | Management .3 $\qquad$ |
| EXHP | 549 | Facilitation of Adventure Education. 3 |

$\overline{\text { TOTAL } 20}$

| Fitness and | Recreational Sports Management Minor |
| :--- | :--- | :--- |
| Courses | Titles |
| ACCTG 201 | Financial Accounting ............................. 3 |

# NURSING DEPARTMENT 

Associate Dean: Dr. Donna Wofford<br>Undergraduate Coordinator: Ruth DePalma<br>Graduate Coordinator: Joe Franta<br>Faculty: Cerankowski, Deniro, Howard, Nichols, Rooney, Samaras, Smiley, Whetzel, Williams

## Department Mission

The mission of the Department of Nursing is to prepare graduates for professional positions as safe, competent and caring nurses to meet the healthcare needs of diverse populations.

## Department Goals

The Nursing Department will:

- Provide quality learning experiences for nursing students that prepare graduates for entry level baccalaureate nursing practice or advanced nursing practice in a culturally diverse community.
- Provide multiple degree entry paths based on previous education and academic entrance criteria that support student achievement at a professional level.
- Serve as a regional nursing education center for southern Colorado, by collaborating with local and regional health care agencies to provide nursing programs.
- Maintain educational excellence demonstrated by program status consistent with the Colorado Board of Nursing, national accrediting agency criteria and educational emphases on professional nursing standards.
- Provide a supportive and caring learning environment to address the learning needs for a diverse student population.
- Support role development responsive to the changing health care environment by redefining and maintaining competencies throughout one's practice.


## National Accreditation

The CSU-Pueblo Department of Nursing baccalaureate educational program is fully accredited by the National League for Nursing Accrediting Commission (NLNAC), 3343 Peachtree Rd NE, Suite 500, Atlanta, GA 30326.

## State Board Approval

The CSU-Pueblo Department of Nursing baccalaureate educational program is fully approved by the Colorado Board of Nursing.

## The Bachelor of Science in Nursing Program

The Colorado State University-Pueblo Department of Nursing offers an undergraduate program that confers a Bachelor of Science in Nursing (BSN). The undergraduate program offers several options for the basic nursing student (Basic BSN), the registered nurse (RN-BSN), licensed practical nurse (LPN-BSN), degree plus students to BSN (Accelerated-BSN), and the paramedic (Paramedic-BSN) to obtain their BSN degree. The Basic BSN is an option developed for the student who has completed prerequisite courses and has no degree, certificate or license. The RN-BSN option is developed for an associate degree or diploma nurse with a license to complete their BSN. The student with another baccalaureate or masters degree may apply to the Degree Plus to BSN option or the Basic BSN. Licensed practical nurses that have a nursing license or completed an accredited program may apply for the LPN-BSN or Basic BSN option. The paramedic may elect to apply for the Paramedic-BSN or Basic BSN option. The BSN program also offers an elective concentrated clinical practicum in nursing. The elective practicum allows the student to explore their passion in clinical practice.

## Expected Student Undergraduate Outcomes

The Bachelor of Science in Nursing Major is designed to prepare the graduate to:

- Demonstrate caring through advocacy for patients by recognizing the patient or designee as the source of control and as full partner in providing compassionate care based on respect for patient's preferences, values, and needs.
- Collaborate effectively within nursing and interprofessional teams, fostering open communication, mutual respect, and shared decision-making to achieve safe, quality patient care in a variety of health care settings.
- Use nursing judgment based on best current evidence to ensure optimal outcomes for patients and families across the lifespan.
- Apply principles of safety and quality improvement to monitor the outcomes of care processes and minimize risk to patients and health care providers.
- Use information and technology to communicate, manage knowledge, prevent error, and support decision-making.
- Demonstrate professional identity, integrity, and leadership as the coordinator of patient care.


## Outcome Assessments

The outcome assessments will be evaluated through or by:

- Assessment of clinical competencies through multiple strategies including simulations and clinical evaluation tools.
- Individual and course evaluations including the standardized testing program.
- Survey of nursing graduates and their employers.
- National Certification and/or Licensure Examination (NCLEX) required of graduates prior to professional nursing practice as a registered nurse.
- A survey of graduate employment and graduation rates.


## Undergraduate Admission Policies and Procedures

Students are responsible for all undergraduate admissions policies and procedures as outlined in the Academic Policies section of this catalog.

## Undergraduate Admission Requirements

There are two ways to apply for admission to the Nursing Program.

## Admission as a High School Senior to Nursing Program as a Freshman

Slots for admission as a freshman are limited. Admission is not guaranteed as students with the highest GPA's and ACT/SAT scores will have priority selection. Preference is given to students graduating from Southern Colorado high schools and/or Health Academy programs. In order to be admitted directly in to the program as a freshman, students must:

- Demonstrate proof of high school diploma. Students must show proof of 3 years of science, including biology and chemistry and proof of algebra or equivalent.
- Have a cumulative high school GPA of 3.25 or higher on a 4.0 scale.
- Have minimal scores: ACT 22 or SAT 1530.
- Remain a full-time CSU-Pueblo student and maintain a 3.0 cumulative average and 3.0 nursing prerequisite average while taking courses at CSU-Pueblo.
- Have prerequisites and general education completed by the start of the second semester sophomore year.

If students do not have these requirements, they will lose their opportunity to progress directly into the nursing program.

Students denied admission as freshman are eligible to apply as second semester sophomores.

## Admission as a Second Semester Sophomore from CSU-Pueblo or Transfer from an Accredited School

Admission to the University does not imply acceptance to the nursing program. The undergraduate program is very competitive and applicants are ranked based on their GPA for the general education and prerequisites required by the program. Fifty percent of the prerequisites and general education courses must be completed by the application deadline. Additional consideration will be given to students completing their prerequisite and general education coursework here at CSU-Pueblo. For the basic nursing student admission:

- Requirements are a minimum GPA of 3.00 for all required general education and prerequisites. All prerequisites must be passed with a C or better (C- is not acceptable) and be completed prior to the term of entrance into the nursing program. Students receiving a grade less than $C$ in a nursing prerequisite course are not eligible for admission. Prerequisite courses may be repeated one (1) time only for admission eligibility.
- All general education must be completed prior to the term of entrance into the nursing program.
- The student needs to be admitted to CSU-Pueblo first, and then submit a separate application to the nursing program the year prior to the spring (traditional) or summer (accelerated) term they plan to start the program. During the pre-nursing phase of the application process, students will be advised by the pre-nursing advisor.

Students will be notified in writing of their admission status to the program. Those students who are accepted to the program must return receipt of acceptance by the stated deadline or the admission status will be revoked.

Students for whom English is a second language must have a TOFEL of 550 or have completed the University requirements of English and Speech skills.

## Undergraduate Nursing Program Application Process

Applications to the nursing program may be obtained at http://ceeps.colostate-pueblo.edu/nursing or in the nursing department. The completed applications must be submitted to the nursing department by the scheduled deadline. Incomplete applications will not be processed. Please contact the department if you have any questions regarding your application.

## Post Acceptance Requirements

Before a student starts the nursing program they must attend a mandatory orientation.

The following must be submitted through nursing tracking system after receiving a personal identification number from the University and instructions from the Department of Nursing prior to orientation. Failure to do so by the stated deadline will result in loss of admission status.

- Background check per Colorado Law. (House bill 971084).
- A urine drug screen.
- Current certification in CPR (Health Care Provider-C or equivalent).
- Current physical examination within the last year and current immunizations including, hepatitis $B$ series, TB test or two step if necessary, measles, mumps, rubella, influenza, tetanus and varicella titers.

The following must be submitted to the Department of Nursing prior to orientation by the stated deadline:

- Current unofficial transcripts showing completion of all prerequisite and general education classes.
- Return receipt for program acceptance.


## Acceptance of Transfer Credit

Transfer credit will be awarded per the published Academic Policies section of this catalog. Credit will be awarded for a course in which a grade of $C$ or better was earned. Grades of C - are not accepted for any nursing or nursing prerequisite course. Requests for transfer of nursing credit are evaluated on an individual basis.

## Time Limits

For applicants to all options (except the RN to BSN), Anatomy \& Physiology I \& II, Intro to Human Development, and Pathophysiology completed (5) years or more before applying to the nursing program will not be accepted as satisfying the prerequisite requirement.

Nursing courses completed five (5) or more years before the date of graduation, either at CSU-Pueblo or at some other institution, will not be accepted as satisfying graduation requirements without the approval of the nursing undergraduate program coordinator and Associate Dean.

## Academic Standards

Students are responsible for all academic standards policies per the published Academic Policies section of this catalog. In addition to those policies, the following applies:

- Students must complete all nursing courses with a grade of B or better. Failure of any nursing courses will result in dismissal from the program. The student may be eligible for re-admission on a one-time basis
only. If readmission is granted, subsequent failure will make the student ineligible for re-admission.
- Students must follow their appropriate program option course sequence plan.


## Graduation Requirement

The BSN degree will be granted to undergraduate nursing degree-seeking students who meet all of the published requirements plus the additional requirements below:

- Have a cumulative nursing GPA of 3.00 or better at graduation. All required prerequisite courses must be passed with a C or better. All nursing courses must be passed with a B or better.
- Complete the program's minimum number of hours of approved nursing course work within five years.


## Licensure Examination

Students must complete all of the Bachelor of Science in Nursing requirements and required national standardized exams in order to be qualified to sit for the National Certification Licensure Examination.

## The Basic Bachelor of Science in Nursing Option (Basic BSN)

The Basic BSN program assists the new student who has completed their prerequisite courses to enter a dynamic ever-changing profession of nursing by completing their BSN degree requirements. The program is based on a philosophical approach to nursing that includes the holistic synthesis of person, health and environment. The Colorado State University-Pueblo offers the ideal foundation for the development of the professional nurse.

## Program of Study

The pre-nursing advisor is notified once the student has declared their major. The student must contact their prenursing advisor to develop their program plan as soon as possible. The plan will include 46 credit hours of required prerequisite courses and 74 credit hours of nursing courses for a total of 120 credit hours.

## Hybrid Courses

A hybrid course is a combination classroom/Internet course. Students meet in a classroom at a regularlyscheduled time and place, the rest of the time is spent online. Both parts of the course, classroom attendance and online work, are mandatory.

Students are expected to subscribe to an email discussion list, communicate on a regular basis with the instructor, and collaborate extensively with others in their class.

In order to take a hybrid course, the student must have access to a computer so they can send and receive email, find information on the Internet, and participate in online discussions. Basic instruction in computers or the Internet will not be provided.

## General Education and Prerequisites Courses

Courses Titles Credits

ENG 101 Composition I........................................ 3
ENG 102 Composition II....................................... 3
SPCOM 103 Speaking and Listening ........................ 3
BIOL 206/L Introduction to Microbiology/Lab........... 4
BIOL 223/L Human Physiology \& Anatomy I/Lab .... 4
BIOL 224/L Human Physiology \& Anatomy II/Lab ... 4
CHEM 111/L Principles of Chemistry/Lab.................. 4
MATH 156 Introduction to Statistics ........................ 3
NSG 207 Nursing Pathophysiology...................... 3
PSYCH 151 Human Development............................. 3
History Per Gen. Ed. Requirement .................... 3
Foreign Language ............................................................. 3
Humanities Per Gen. Ed. Requirement .................... 3
Social Science Per Gen. Ed. Requirement ................... 3
TOTAL 46

| NSG | ses | Titles Credits |
| :---: | :---: | :---: |
| NSG | 231 | Concepts for Professional Nursing ...... 2 |
| NSG | 232/L | Fundamentals of Nursing Care/Lab..... 7 |
| NSG | 302/L | Health Promotion \& Assessment/Lab ... 3 |
| NSG | 308 | Pharmacology in Nursing Practice....... 3 |
| NSG | 312/L | Caring for Childbearing Family/Lab ...... 6 |
| NSG | 322/L | Caring for Adults I/Lab....................... 8 |
| NSG | 331 | Healthy Aging .................................. 2 |
| NSG | 332/L | Caring for Children/Families/Lab ......... 6 |
| NSG | 351 | Evidence Based Nursing Practice ........ 3 |
| NSG | 371 | Healthcare Informatics....................... 2 |
| NSG | 382/L | Dynamics of Behavioral Health/Lab..... 6 |
| NSG | 420/L | Caring for Adults II/Lab...................... 8 |
| NSG | 442/L | Global Public Health/Lab .................... 6 |
| NSG | 451 | Nursing Leadership \& Issues.............. 3 |
| NSG | 452/L | Comprehensive Nursing Practice/Lab .. 9 |

TOTAL 74

## Elective Concentrated Clinical Practicum

The elective concentrated clinical practicum allows the student enrolled in the Basic options to choose an area of clinical concentration during their progression through the program. The student will meet with their advisor and course coordinator to develop their plan. The elective concentrated clinical practicum is not an option for students enrolled in the degree plus to BSN accelerated option.

## Summer-Junior

NSG 372 Clinical Practicum I
3

| Spring - Senior |  |
| :---: | :---: |
| NSG 472 | Clinical Practicum II ........................... 3 |
| Basic BSN Option Program Plan |  |
| Freshman - Fall |  |
| Courses | Titles Credits |
| ENG 101 | Composition I.................................... 3 |
| BIOL 223/L | Human Physiology \& Anatomy I/Lab .... 4 |
| PSYCH 151 | Human Development......................... 3 |
| SPCOM 103 | Speaking and Listening ..................... 3 |
| Foreign Language ...................................................... 3 |  |

## Freshman - Spring

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| ENG 102 | Composition II................................... 3 |  |
| BIOL 224/L | Physiology \& Anatomy II/Lab.............. 4 |  |
| MATH 156 | Introduction to Statistics....................... 3 |  |
| Humanities | Per Gen. Ed. Requirement ............... 3 |  |
| Social Science | Per Gen. Ed. Requirement ............... 3 |  |

TOTAL 16

## Sophomore - Fall

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| BIOL | 206/L | Introduction to Microbiology/Lab ......... 4 |
| CHEM | 111/L | Principles of Chemistry/Lab ................. 4 |
| NSG 207 | Nursing Pathophysiology .................... 3 |  |
| History |  | Per Gen. Ed. Requirement ............... 3 |
|  |  |  |
|  |  |  |

## Sophomore - Spring

| Cour |  | Titles Credits |
| :---: | :---: | :---: |
| NSG | 231 | Concepts for Professional Nursing ...... 2 |
| NSG | 232/L | Fundamentals of Nursing Care/Lab ..... 7 |
| NSG | 302/L | Health Promotion \& Assessment/Lab ... 3 |
| NSG | 331 | Healthy Aging .................................. 2 |
| NSG | 371 | Healthcare Informatics....................... 2 |
|  |  | TOTAL 16 |

## Junior - Fall

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| NSG | 308 | Pharmacology in Nursing Practice....... 3 |
| NSG | $312 / \mathrm{L}$ | Caring for Childbearing Family/Lab |
|  |  | OR |
| NSG | $332 / \mathrm{L}$ | Caring for Children/Families/Lab .......... 6 |
| NSG | 382/L | Dynamics of Behavioral Health/Lab..... 6 |

TOTAL 15

## Junior - Spring

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| NSG | $322 / \mathrm{L}$ | Caring for Adults I/Lab......................... 8 |
| NSG | $312 / \mathrm{L}$ | Caring for Childbearing Family/Lab |
|  |  | OR |
| NSG | 332/L | Caring for Children/Families/Lab ......... 6 |
| NSG | 351 | Evidence Based Nursing Research ..... 3 |

## Senior - Fall

(Graduation Planning Due)

| Courses | Titles | Credits |
| :--- | :--- | :--- | :--- |
| NSG | $420 / \mathrm{L}$ | Caring for Adults II/Lab.......................... 8 |
| NSG | $442 / \mathrm{L}$ | Global Public Health/Lab ................. 6 |

TOTAL 14

## Senior - Spring

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| NSG | 451 | Nursing Leadership \& Issues............... 3 |
| NSG | $452 / \mathrm{L}$ | Comprehensive Nursing Practice/Lab .. 9 |
|  |  |  |
|  |  |  |
|  |  | TOTAL 12 |

## Licensed Practical Nurses Bachelor of Science in Nursing Option (LPN-BSN)

Licensed practical nurses who wish to obtain their Bachelor of Science in Nursing degree may do so through the LPN-BSN option. To qualify for this option the student must apply thru the regular nursing application process.

## LPN-BSN Option Admission Requirements

In addition to the undergraduate program admission requirements, the applicant for this option will:

- Bring the actual license of certificate to the Department of Nursing for faculty visualization and photocopying prior to the start of the first nursing class.
- Receive seven escrow credits for NSG 232/232L, awarded for LPN credits.


## Program of Study

The pre-nursing advisor will meet with the student to plan a program of study for the LPN-BSN option. The program of study will include 46 credit hours of prerequisite courses (see Basic BSN), and 74 credit hours of nursing courses. The licensed practical nurse may transfer in seven nursing escrow credit hours per the articulation agreement.*

## LPN-BSN Option Program Plan

## Prerequisite Courses

(See Basic BSN)

## Spring or Summer

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| NSG | 231 | Concepts for Professional Nursing ....... 2 |
| NSG | 232/L* | Fundamentals of Nursing Care/Lab ...... 7 |
| NSG | 302/L | Health Promotion \& Assessment/Lab ... 3 |
| NSG | 331 | Healthy Aging .................................. 2 |
| NSG | 371 | Healthcare Informatics ........................ 2 |
|  |  | TOTAL 16 |
| Junior - Fall |  |  |
| Courses |  | Titles Credits |
| NSG | 308 | Pharmacology in Nursing Practice....... 3 |
| NSG | 312/L | Caring for Childbearing Family/Lab OR |
| NSG | 332/L | Caring for Children/Families/Lab ......... 6 |
| NSG | 382/L | Dynamics of Behavioral Health/Lab...... 6 |

TOTAL 15
Junior - Spring

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| NSG | 322/L | Caring for Adults I/Lab ....................... 8 |
| NSG | $312 / \mathrm{L}$ | Caring for Childbearing Family/Lab |
|  |  | OR |
| NSG | $332 / \mathrm{L}$ | Caring for Children/Families/Lab .......... 6 |
| NSG | 351 | Evidence Based Nursing Research ..... 3 |

$\overline{\text { TOTAL } \quad 17}$

## Senior - Fall

(Graduation Planning Due)

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| NSG | $420 / \mathrm{L}$ | Caring for Adults II/Lab .......................... 8 |
| NSG | $442 / \mathrm{L}$ | Global Public Health/Lab ................. 6 |

TOTAL 14

| Senior - Spring |  |  |
| :--- | :--- | :--- |
| Courses | Titles | Credits |
| NSG | 451 | Nursing Leadership \& Issues.............. 3 |
| NSG | 452/L | Comprehensive Nursing Practice/Lab .. 9 |

TOTAL 12

## Registered Nurse to Bachelor of Science in Nursing Option (RN-BSN)

## RN-BSN Admissions Requirements

Students must meet basic nursing program admission requirements and for the RN-BSN option which is governed by the "Colorado Articulation Model." See Basic BSN for after admission requirements. The completed applications must be submitted to the nursing department by the scheduled deadline. Incomplete applications will not be processed. Please contact the department if you have any questions regarding your application. Additional requirements for the RN-BSN option include:

- Completion of an Associate Degree or Diploma in Nursing.
- Colorado registered nursing license in good standing.
- Resident of the State of Colorado
- Admission to CSU-Pueblo


## Program of Study

The student must confer with the RN-BSN advisor to develop a program of study which is designed to assist the working RN in returning to school to complete their BSN. Courses are offered on-line and hybrid. The RN-BSN option will include 33 credit hours through articulation, 43 credit hours of prerequisite or co-requisite courses and 44 credit hours of nursing and approved elective courses for a total of 120 credit hours. Students must pass all nursing courses with a B or better and maintain a nursing 3.00 GPA. RN's transferring from community colleges can transfer in 43 prerequisite credits along with 33 RN credits for a total of 76 credit hours. This applies only to the students in the RN to BSN program.
Nursing Transfer/Credits ..... 33
Prerequisite Courses (excluding NSG 207) ..... 43
Required General Education and Science Courses
(Excluding NSG 207)

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| ENG | 101 | Composition I................................... 3 |
| ENG | 102 | Composition II................................... 3 |
| SPCOM | 103 | Speaking and Listening ...................... 3 |
| BIOL | 206/L | Introduction to Microbiology/Lab .......... 4 |
| BIOL | 223/L | Human Physiology \& Anatomy I/Lab ... 4 |
| BIOL | 224/L | Human Physiology \& Anatomy II/Lab .... 4 |
| CHEM | 111/L | Principles of Chemistry/Lab ................ 4 |
| MATH | 156 | Introduction to Statistics ..................... 3 |
| PSYCH | 151 | Human Development......................... 3 |
| History |  | Per Gen. Ed. Requirement ................. 3 |
| Foreign | ng |  |


| Humanities | Per Gen. Ed. Requirement ........................ 3 |
| :--- | :--- |
| Social Science | Per Gen. Ed. Requirement .............. 3 |

TOTAL 43

## RN-BSN Courses

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| NSG | $302 / L$ | Health Promotion \& Assessment/Lab ... 3 |
| NSG | 307 | Health and Disease Systems............... 3 |
| NSG | 309 | Professional Nursing Practice............ 4 |
| NSG | 311 | Concepts for Professional Nursing ...... 4 |
| NSG | 331 | Healthy Aging ..................................... 2 |
| NSG | 351 | Evidence Based Nursing Practice....... 3 |
| NSG | 371 | Healthcare Informatics....................... 2 |
| NSG | $442 / L$ | Public Health Nursing/Lab ................. 6 |
| NSG | 451 | Nursing Leadership and Issues ........... 3 |
| NSG | $452 / L$ | Comprehensive Nursing Practice/Lab .. 9 |
| Approved upper division elective.................................... 1 |  |  |
| Approved electives (lower or upper division)................. 4 |  |  |

TOTAL 44

## RN-BSN Option Program Plan

## Prerequisite Courses

(See Basic BSN - excluding NSG 207)
Fall - Junior
Courses Titles Credits
NSG 307 Health and Disease Systems................ 3
NSG 309 Professional Nursing Practice............... 4
Approved electives (lower or upper division)..................... 4
TOTAL 11
Spring - Junior

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| NSG | 311 | Concepts for Professional Nursing ...... 4 |
| NSG | 351 | Evidence Based Nursing Practice........ 3 |
| NSG | 371 | Healthcare Informatics....................... 2 |

TOTAL 9

## Summer - Junior

Courses Titles Credits
NSG 302/L Health Promotion \& Assessment/Lab ... 3
NSG 331 Healthy Aging ....................................... 2
TOTAL 5

## Fall - Senior

Courses Titles Credits
NSG 442/L Global Public Health/Lab ...................... 6
Approved upper division elective....................................... 1
$\overline{\text { TOTAL } 7}$
Spring - Senior

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| NSG | 451 | Nursing Leadership \& Issues............... 3 |
| NSG | $452 / \mathrm{L}$ | Comprehensive Nursing Practice/Lab .. 9 |

> | TOTAL 12 |
| :--- | :--- |

## Degree Plus to BSN Nursing Accelerated Option

The Nursing Department's belief of creating a generalist able to function as a professional in today's workforce enables the department to individually assess the student with a degree other than nursing in order to grant credit for courses taken.

The Degree-Plus Accelerated Option is for students with a previous non-nursing baccalaureate degree. The applicant must have completed the necessary prerequisites prior to starting the program. The Accelerated Option offers students an intense, challenging approach that enables students to complete the Bachelor of Science in Nursing degree in 14 months.

Previous coursework necessary for admission to the Accelerated Option includes the natural, social, and behavioral sciences. Most students in their previous degree may have completed most of the prerequisites required. During the Accelerated year, students participate in a reality based curriculum that includes classroom, Internet, and real life clinical experiences in state-of-the-art facilities.

The belief is that a student with a previous degree has moved from simple to more complex use of theories/experiences either in their educational and/or work environments. This and use of multi-theoretical frameworks is congruent with the Nursing Department's philosophy.

The degree-plus student is expected to meet with the prenursing advisor for advisement and plan development. The student must have a cumulative prerequisite GPA of 3.0 and follow all admission requirements set forth in the Basic Nursing Option. Due to the intensity of the curriculum, it is advised that the student not work and be able to attend to their studies full-time. Students must maintain a cumulative nursing 3.00 GPA to progress.

| Prerequisite Courses |  |  |
| :---: | :---: | :---: |
| BIOL | 206/L | Introduction to Microbiology/Lab .......... 4 |
| BIOL | 223/L | Human Physiology \& Anatomy I/Lab .... 4 |
| BIOL | 224/L | Human Physiology \& Anatomy II/Lab ... 4 |
| CHEM | 111/L | Principles of Chemistry/Lab ................ 4 |
| MATH | 156 | Introduction to Statistics...................... 3 |
| NSG | 207 | Pathophysiology ............................... 3 |
| PSYCH 151 <br> Foreign Languag |  | Human Development......................... 3 |
|  |  |  |
|  |  | TOTAL 28 |
| Degree Plus to BSN Nursing Accelerated Option Program Plan |  |  |
| Summer |  |  |
| Courses |  | Titles Credits |
| NSG | 231 | Concepts for Professional Nursing ...... 2 |
| NSG | 232/L | Fundamentals of Nursing Care/Lab..... 7 |
| NSG | 302/L | Health Promotion \& Assessment/Lab ... 3 |
| NSG | 308 | Pharmacology in Nursing Practice....... 3 |
| NSG | 331 | Health Aging ..................................... 2 |
|  |  | TOTAL 17 |
| Fall |  |  |
| Courses |  | Titles Credits |
| NSG | 312/L | Caring for Childbearing Family/Lab ...... 6 |
| NSG | 322/L | Caring for Adults I/Lab ....................... 8 |
| NSG | 332/L | Caring for Children/Families/Lab ......... 6 |
|  |  | TOTAL 20 |
| Spring |  |  |
| Courses |  | Titles Credits |
| NSG | 351 | Evidence Based Nursing Practice........ 3 |
| NSG | 382/L | Dynamics of Behavioral Health/Lab...... 6 |
| NSG | 420/L | Caring for Adults II/Lab ...................... 8 |
| NSG | 371 | Healthcare Informatics....................... 2 |
|  |  | TOTAL 19 |
| Summer |  |  |
| Courses |  | Titles Credits |
| NSG | 442/L | Global Public Health/Lab .................... 6 |
| NSG | 451 | Nursing Leadership \& Issues ............... 3 |
| NSG | 452/L | Comprehensive Nursing Practice/Lab .. 9 |

$\overline{\text { TOTAL } \quad 18}$

## Paramedic to Bachelor in Nursing Accelerated Option (Paramedic-BSN)

The Paramedic to BSN option allows the paramedic who has graduated from an accredited program to complete their BSN. The applicant must have completed the necessary prerequisite courses prior to starting the program.

Previous coursework necessary for admission to the Paramedic to BSN includes the natural, social, and behavioral sciences. The students participate in a realitybased curriculum that includes classroom, internet, and real life clinical experiences in state-of-the-art facilities.

The belief is that a student moves from simple to more complex in their use of theories/experiences either in their education and/or work environments. This belief and use of multi theoretical frameworks is congruent with the Nursing Department's philosophy.

The student is expected to meet with a nursing advisor for advisement and plan development. The student must follow all admission requirements set forth in the Basic Nursing Program. Due to the intensity of the curriculum, it is advised that the student not work and be able to attend to their studies full-time.

## Prerequisite and General Education Courses

Courses Titles Credits
ENG 101 Composition I....................................... 3
ENG 102 Composition II...................................... 3
SPCOM 103 Speaking and Listening ........................ 3
BIOL 206/L Introduction to Microbiology/Lab........... 4
BIOL 223/L Human Physiology \& Anatomy I/Lab .... 4
BIOL 224/L Human Physiology \& Anatomy II/Lab ... 4
CHEM 111/L Principles of Chemistry/Lab.................. 4
MATH 156 Introduction to Statistics ........................ 3
NSG 207 Nursing Pathophysiology ....................... 3
PSYCH 151 Human Development............................. 3
History Per Gen. Ed. Requirement ................... 3
Foreign Language............................................................ 3
Humanities Per Gen. Ed. Requirement ................... 3
Social Science Per Gen. Ed. Requirement .................... 3
TOTAL 46

## Program Plan

## Summer

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | ---: |
| NSG | 231 | Concepts for Professional Nursing ......2 |  |
| NSG | 232/L | Fundamentals of Nursing Care/Lab..... 7 |  |
| NSG | 302/L | Health Promotion \& Assessment/Lab ... 3 |  |
| NSG | 308 | Pharmacology in Nursing Practice........ 3 |  |
| NSG | 331 | Health Aging................................. 2 |  |

TOTAL 17

## Fall

Courses Titles Credits
NSG 312/L Caring for Childbearing Family/Lab ...... 6
NSG 322/L Caring for Adults I/Lab.......................... 8
NSG 332/L Caring for Children/Families/Lab .......... 6

TOTAL 20

## Spring

Courses Titles Credits
NSG 351 Evidence Based Nursing Practice......... 3
NSG 382/L Dynamics of Behavioral Health/Lab...... 6
NSG 420/L Caring for Adults II/Lab ......................... 8
NSG 371 Healthcare Informatics........................... 2

TOTAL 19

## Summer

Courses Titles Credits
NSG 442/L Global Public Health/Lab ...................... 6
NSG 451 Nursing Leadership \& Issues................. 3
NSG 452/L Comprehensive Nursing Practice/Lab .. 9
TOTAL 18

# TEACHER EDUCATION PROGRAM 

Associate Dean: Dr. Victoria Marquesen

Faculty: Checho, Massey, Peters, Pettit, Piazza, Piquette,

## Mission of the Teacher Education

The Teacher Education Program has a primary mission of preparing teachers of quality and distinction. At Colorado State University-Pueblo, preparing teachers is a campuswide responsibility, with faculty and administrators involved in support of the program's mission. An integral component of the program is its formal partnership with 17 school districts and four community colleges in southern and southeastern Colorado. The joint efforts of students, faculty, and administrators across all partners focus on improving the quality of learning in classrooms in elementary, secondary, and higher education.

## Conceptual Framework-Building and Bridging Communities of Learners

A Conceptual Framework is a guide for how a teacher education program is planned and organized, summarizing its philosophical views of the roles of teaching and learning and its essential understandings of how students become teachers. The conceptual framework of teacher education at Colorado State University-Pueblo is Building and Bridging Communities of Learners. The organizing theme of learning communities focuses the attention of faculty and students on the essential nature of teaching and learning: How does community shape learning and achievement? What are the roles of successful learners and teachers? What social interactions are necessary for both learning and community? How is the definition of a learning community changing in an increasingly technological age? What is the relationship between the concept of learning community and the democratic ideal of American education?

For faculty at CSU-Pueblo, the vision of quality education requires a learner-centered environment in which learning (not teaching) is at the core. All learners will achieve in communities in which learning is publicly and constructively discussed, a positive climate surrounds all members, and support exists for all learners' individual growth and development.

Inclusive, equitable communities require constant attention to the nature of relationships among teachers and students. CSU-Pueblo students will be prepared to participate as learners and teachers in overlapping and expanding learning communities-from the University classroom to K-12 settings, the professional education community, distributed communities created by technology, and cultural, economic, and political communities of students and their families.

To become beginning teachers, students must change their perceptions of themselves as learners and as students of teaching. As students progress through the program, they will skillfully assume a variety of roles, including those of master learners, instructors, collaborators, apprentices, models, coaches, colleagues, and mentors. It is the mission of the teacher education program to prepare teachers and learners of quality and distinction by exposing students to quality communities of teaching and learning.

## Program Goals

- Prepare teachers of quality and distinction with broadbased liberal arts education, depth of knowledge in the areas in which they teach, and the ability to skillfully translate theory and practice to ensure student learning.
- Create a learner-centered community designed to achieve program goals and expected student results.
- Provide systematic advising and evaluation activities which assure student success and program quality.
- Serve the region and state of Colorado through partnerships with school districts and institutions of higher education.


## Expected Student Outcomes

The Teacher Education Program is a standards-based model of education. Student outcomes are the foundation of the program, upon which the curriculum, instruction, and assessment are aligned and implemented. Based on its mission to produce teachers of quality and distinction, the program has adopted goals in eight areas. Each goal has been articulated into a series of performance-based standards or outcomes that all students must achieve before completing the program. Benchmarks, or more specific outcomes, for each standard have been developed as course objectives throughout the program and faculty across campus have organized course
requirements and assignments to assure that students can meet these standards at high levels.

Standards are aligned with the Performance-based Standards for Colorado Teachers (2000) and requirements of the Colorado Department of Education and Colorado Department of Higher Education. Proficiency in all standards is required for successful completion of teacher education and recommendation for state licensure.

CSU-Pueblo teacher education graduates will:

1. Use democratic principles to create communities of learners that assure positive social interactions, collaboration, and cooperation.
2. Create learning experiences that make content knowledge accessible, exciting, and meaningful for all students.
3. Create a learning community in which individual differences are respected, appreciated, and celebrated.
4. Ensure, through the use of standards and informal and formal assessment activities, the continuous development of all learners.
5. Construct and use pedagogy to maximize the intellectual, social, physical, and moral development of all students.
6. Be reflective decision-makers, incorporating understandings of educational history, philosophy, and inquiry, as will as the values of the democratic ideal.
7. Create communities of learning by working collaboratively with colleagues, families, and other members.
8. Model the professional and ethical responsibilities of the education profession.

## Outcome Assessment Activities

Teacher Education assesses student knowledge and skills at three points in the program: admission to education, admission to student teaching, and during the student teaching semester (program completion). Assessment activities include a review of 1) performance documented in students' eportfolios; 2) scores on standardized tests of general education and content knowledge; 3) ratings of proficiency on program standards by K-12 classroom teachers, University faculty, and student teacher supervisors based on direct observation of teaching; 4) self-evaluations/ratings of proficiency on program standards by program completers and graduates one year after teaching; and 5) ratings of proficiency by K-12 supervisors after graduates have taught for one year.

## Teaching Endorsement Areas

The Teacher Education Program collaborates with other academic units to offer programs leading to Colorado teacher licensure in the following endorsement areas:

- $\quad$ Art (K-12)
- Elementary Education (K-6)
- English (7-12)
- Foreign Languages (7-12) -Spanish
- Mathematics (7-12)
- Music (K-12)
- Physical Education (K-12)
- Science (7-12)
- $\quad$ Social Studies (7-12)

See the Teacher Education Handbook for add-on endorsements that have been approved by the Colorado Department of Education in K-12: Instructional Technology, Culturally Linguistically Diverse Education, and Special Education.

## Selective Entry and Retention in Teacher Education Admission

Many education courses require the prerequisite of admission to education (see description of courses). Students complete the admission to education process during ED 301: Frameworks of Teaching. The entire process for gathering information and submitting it to faculty is completed during the course.

The following are the requirements that must be met to be admitted to teacher education. No exceptions can occur to these requirements:

1. Cumulative grade point of 2.600 or greater.
2. Completion of ENG 101 and 102 with grades of $C$ or better.
3. Completion of MATH 109 or math course required by major field. A grade of $B$ or better is required in MATH 109 or MATH 360; a grade of $C$ or better is required in MATH 121, 124, 126, or 221. Students who complete both MATH 109 and MATH 156 or MATH 360 and MATH 361 prior to admission may be admitted with grades of $C$ or better in both courses.
4. Completion of SPCOM 103 with a grade of B- or better, or, students completing SPCOM 103 with a C or degree plus students may complete this competency through the Oral Proficiency Exam.
5. Completion of ED 301 with a grade of C or better.
6. Completion of a formal, standardized test during ED 301 such as the Proficiency Profile and a writing sample.
7. Completion of satisfactory background check with the Colorado Bureau of Investigation. Background check is sent to the Colorado Department of Education and report must meet the criteria required for obtaining a
teaching license in Colorado as outlined in 22-60.5103 C.R.S.
8. Completion of an education portfolio. Six types of materials will be submitted with the portfolio: 1) transcripts and official documents demonstrating students performance in University classes, 2) materials developed in University classes which demonstrate proficiency on specific education standards, 3) recommendations and evaluations from teachers, 4) materials used in field experiences and videos of teaching, 5) personal reflections and summaries about progress, and 6) results of formal tests. Specific portfolio requirements and manner of evaluation are included in the appendices to the Teacher Education Handbook. All portfolios will be submitted in electronic format (website).

## Retention

Students must maintain a cumulative GPA of 2.600 and must continue to make progress towards proficiency on program standards to remain in the teacher education program. Additional details related to program retention are included in the Teacher Education Handbook.

## Student Teaching

Student teaching provides opportunities to integrate theory with practice. Prior to being approved for a student teaching assignment, the following requirements must be met:

1. Completion of all course work including courses in the content area and education.
2. Cumulative GPA of 2.600 .
3. GPA of 2.500 in the academic major.
4. Grades of C or higher in all courses required for licensure.
5. Passing score on the content exam in the student's licensure area, required by the State of Colorado.
6. Successful completion of an education portfolio. Six types of materials will be submitted with the portfolio: 1) transcripts and official documents demonstrating students performance in University classes, 2) materials developed in University classes which demonstrate proficiency on specific education standards. 3) recommendations and evaluations from teachers, 4) materials used in field experience and videos of teaching, and 5) personal reflections and summaries about progress. Specific portfolio requirements and manner of evaluation are included in the appendices to the Teacher Education Handbook. All portfolios will be submitted in electronic format (website).
7. Successful completion of all required early field experience hours and cooperating teacher evaluations. Hours must include work at the appropriate levels and in a variety of diverse high need settings.
8. Completion of any support plans.
9. Submission of current satisfactory background check from the Colorado Bureau of Investigation.

Applications must be submitted a semester in advance; the deadline for the application is the same as the deadline for the Graduation Planning Sheet.

Student teaching requires full time effort; therefore students may not enroll in University courses other than Student Teaching and Capstone Seminar.

## Teacher Licensure

At completion of student teaching, the University Supervisor will recommend the student teacher for licensure. This recommendation is required for the institutional recommendation for successful program completion and recommendation to the Colorado Department of Education for a teaching license. Recommendation for licensure is not required for completion of the education minor.

## Specific Requirements for the Elementary Teaching Endorsement

CSU-Pueblo requires the student interested in Elementary Education to complete a Liberal Studies major in addition to the courses in Education listed below.
$\left.\begin{array}{lll}\begin{array}{ll}\text { Courses } \\ \text { ED } & 202\end{array} & \begin{array}{l}\text { Titles } \\ \text { Foundations of Education........................... } 3 \\ \text { PREREQUISITES- None }\end{array} \\ \text { ED } 280\end{array} \quad \begin{array}{l}\text { Educational Media and Technology .............. } 3 \\ \text { EREREQUISITES- None }\end{array}\right\}$

| ED | 413 | Teaching Elementary Social Studies ............. 2 PREREQUISITES-Admission to Education; GPA of 2.6 |
| :---: | :---: | :---: |
| ED | 414 | Teaching Elementary Science \& Health ........ 2 PREREQUISITES-Admission to Education; GPA of 2.6 |
| ED | 417 | Teaching Mathematics in Elementary School. $\qquad$ 2 <br> PREREQUISITES- Admission to Education: GPA of 2.6; Completion of Liberal Studies Math Block. |
| ED | 485 | Capstone Seminar in Education $\qquad$ .2 PREREQUISITES-Admission to Student Teaching. Must be taken with student teaching |
| ED | 487 | Student Teaching Elementary $\qquad$ 12 PREREQUISITES- Admission to Student Teaching |

TOTAL 40

## Specific Requirements for the Secondary and K-12 Teaching Endorsements

The student must complete an appropriate major and the following Education courses:

Courses Titles Credits
One of the following PSYCH courses:............................... 3
PSYCH 151 Human Development PREREQUISITES-None OR
PSYCH 251 Childhood and Adolescence
PREREQUISITES-PSYCH 100
(Music students may take
PSYCH 151 or PSYCH 251)
OR
PSYCH 342 Educational Psychology
PREREQUISITES-PSYCH 100 or 151
ED 202 Foundations of Education .......................... 3
PREREQUISITES-None
ED 280 Educational Media and Technology ........... 3
PREREQUISITES-None
(Music Education students may complete MUS 103 and 306 for ED 280)

ED 301 Frameworks of Teaching. $\qquad$
(Admission to Education is completed in this course) PREREQUISITES-Completion of 45 college hours and a cumulative GPA of 2.6


TOTAL 37-40

* English/Language Arts students must also complete RDG 410.
** Physical Education students may complete EXHP 465 (Adaptive Physical Education) or ED 412.


## Performance Assessment Activities

In the Teacher Education Program, performance assessment is a process that documents the relationship between the stated mission, goals, program standards, and actual student outcomes. Assessment is multidimensional and comprehensive, utilizing a variety of quantitative and qualitative measures.

- Assessment of student progress is frequent and ongoing throughout the program. At three points in the student's program, faculty completes a multidimensional assessment of progress on teacher education program standards: at admission to education, admission to student teaching and during student teaching. These assessments include a review of progress in all courses, evaluation of student performance through a student-constructed portfolio, and review of K-12 teachers' evaluation of student performance in field experiences.
- Evaluation of progress occurs at the end of each semester after admission to education through a review of student performance in University classes and field experiences.
- Student records are maintained in the Teacher Education Office.


## LIBERAL STUDIES PROGRAM

(Major for Elementary Education)

## Dr. Victoria Marquesen, Coordinator

The Liberal Studies major, which leads to a B.S. degree, is intended to provide a strong liberal arts education for future elementary education teachers. Core requirements build upon students' experiences in General Education to provide both breadth and depth in the arts and humanities, English, math, sciences, and social sciences. Required courses provide support in each area of the Colorado K-6 Model Content Standards. Students are required to select an area of concentration or emphasis for an additional 12 hours of study. Areas of concentration may be chosen from Art, Chicano Studies, English, Health, History, Language and Linguistics, Leadership, Math, Modern Foreign Languages, Music, Political Science, Psychology, Science, and Sociology.

This degree is approved for students in Elementary Education. Students completing the Liberal Studies major are required to minor in Education.

## Program Goals

At CSU-Pueblo, teacher education is a campus wide responsibility, and overall program goals reflect components of both the Liberal Studies major and Education minor. It is the purpose of the Liberal Studies major to assure that students will develop breadth and depth of knowledge of the liberal arts, and it is the responsibility of the Education minor to assure students become proficient at transforming this knowledge into curriculum and instruction for young children.

## Expected Student Learning Outcomes

It is the joint responsibility of both the major and minor to prepare future teachers to evaluate information critically, to study and research independently, and to communicate knowledge effectively. The following four program goals have been established for the Liberal Studies Degree. Goal 1 is largely the responsibility of the Liberal Studies major and Goal 4 the responsibility of the Elementary Education minor; benchmarks for Goals 2 and 3 have been designed across the entire degree program.

1. Acquisition of Knowledge. Graduates are broadly educated in the liberal arts and sciences:

- Understanding the significant ideas, concepts, structures and values within disciplines, including theoretical, ethical, and practical implications.
- Mastering content knowledge in all areas taught in elementary schools: the arts, math literature and language, social sciences, sciences, and human development and learning.
- Balancing a breadth of knowledge in the liberal arts and sciences with depth of knowledge within a discipline.

2. Construction of Knowledge. Graduates demonstrate habits of thinking, including analytical skills, independent thinking, reasoned judgment, mature values, and imagination:

- Utilizing the tools of inquiry of the humanities, arts, mathematics, and behavioral, social, and natural sciences to understand and evaluate ideas.
- Developing habits of critical intellectual inquiry, including self-direction and self-reflection.
- Making connections from different intellectual perspectives and multiple viewpoints to form cross-disciplinary connections.
- Utilizing research skills of the liberal arts and sciences, including library and data retrieval skills, to study and evaluate information.

3. Communication of Knowledge. Graduates communicate effectively:

- Writing clearly in a variety of academic and practical formats.
- Speaking effectively in a variety of settings.
- Utilizing technology as a tool to inform and communicate.

4. Application of Knowledge. Graduates create standards-based learning experiences that make knowledge accessible, exciting, and meaningful for all students:

- Using multiple representations and explanations of disciplinary concepts that capture key ideas and link them to students' prior understandings.
- Using different viewpoints, theories, "ways of knowing,' and methods of inquiry in teaching of subject matter content.
- Evaluating curriculum for their comprehensiveness, accuracy, and usefulness for representing particular ideas and concepts.
- Engaging students in generating knowledge and testing hypotheses according to the methods of inquiry and standards of evidence used in the discipline
- Developing and using curricula that encourage students to see and interpret ideas from diverse perspectives.
- Creating interdisciplinary learning experiences that allow inquiry from several subject areas.


## Outcomes Assessment Activities

The knowledge and skills of students in the Liberal Studies major are assessed at three points in their program: admission to education, admission to student teaching, and during the student teaching semester (program completion). Assessment activities include the faculty's review of 1) performance documented in students' eportfolios; 2) scores on standardized tests of general education and content knowledge; 3) ratings of proficiency on program standards by K-12 classroom teachers, University faculty, and student teacher supervisors based on direct observation of teaching; 4) self-evaluations/ ratings of proficiency on program standards by program completers and graduates one year after teaching; and 5) ratings of proficiency by K-12 supervisors after graduates have taught for one year. Standardized tests completed by students in Liberal Studies include the Educational Testing Service's (ETS) Proficiency Profile and either the Praxis II Elementary Content Knowledge Test (produced by ETS) or the PLACE Elementary Education exam (produced by Pearson NES).

## Program Design

The program is planned as a coherent whole, with four components:

## 1. General Education

Specific General Education courses form the foundation of knowledge for all students with this major. These courses fulfill CSU-Pueblo graduation requirements and are essential to meet many of the content standards for elementary teachers. Courses in the arts and humanities, English, math, history, sciences, and social sciences contribute to the General Education core.

## 2. Liberal Studies Core

Liberal Studies Core requirements build upon students' experiences in General Education to provide both breadth and depth to the program to meet program goals. Emphasis is placed on each area relative to K-6 content standards to assure depth of knowledge in the humanities, social sciences, math, and sciences.
3. Liberal Studies Area of Emphasis in a Specific Discipline

Students are required to select an area of concentration or emphasis and, in consultation with an advisor, develop a plan for study for an additional 12 hours in Liberal Studies. The plan should include goals to be achieved by the concentration and the sequence of courses to achieve the goals. Areas of concentration may be chosen from art, Chicano

Studies, English, Health, History, Language and Linguistics, Math, Modern Foreign Languages, Music, Political Science, Psychology, Science, and Sociology. Elementary Education has special requirements for admission and retention. Please refer to the section in the catalog for this information.

## 4. Education Minor

All students must complete a minor in Education. The Education minor, which has been developed to coordinate with the major, requires completion of 40 credit hours. Please refer to Teacher Education Program section/Specific Requirements for the Elementary Teaching Endorsement. Education has special requirements for admission and retention. Please refer to Teacher Education Program section/Selective Entry and Retention in Teacher Education Admission.

## Program Assessment

Assessment will be ongoing, with evaluations at three check points (admission to education, admission to student teaching, and program completion), as well as follow-up assessments at the end of one year after program completion. Student outcomes will be evaluated through, a) formal assessments at the sophomore (e.g., Proficiency Profile) and senior level (PRAXIS or PLACE Elementary Education Content Exam), b) faculty recommendations of student progress, c) portfolio assessment, and d) assessment of the application of knowledge in students' field experiences and student teaching. The contents of the electronic portfolio required of all students will include representative work from courses, as well as student-directed evaluations of progress.

## Requirements for the Liberal Studies Major

Requirements for admission and retention in teacher education are included in the description of the Teacher Education Program in this catalog and in the Teacher Education Handbook.

Students must receive a grade of C or greater in all courses listed as requirements; a minimum cumulative GPA of 2.500 in courses completed in the major at CSUPueblo is required for admission to student teaching.

## GENERAL EDUCATION REQUIREMENTS

## General Education Skill Requirements

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| ENG | 101 | Composition I.......................................... 3 |
| ENG | 102 | Composition II.............................. 3 |
| MATH | 156 | Introduction to Statistics .................. 3 |


| Course |  | Titles Credits |
| :---: | :---: | :---: |
| BIOL | 100 | Principles of Biology .......................... 3 |
| BIOL | 100L | Principles of Biology Lab .................... 1 |
| ENG | 130 | Introduction to Literature..................... 3 |
| GEOG | 103 | World Regional Geography ................ 3 |
| GEOL | 101 | Earth Science ................................... 3 |
| GEOL | 101L | Earth Science Lab ............................. 1 |
| PSYCH |  | Human Development......................... 3 |
| SPCOM |  | Speaking and Listening ..................... 3 |
| One of the following:. |  |  |
| ART | 100 | Visual Dynamics ......................... 3 |
| MUS | 118 | Music Appreciation ...................... 3 |
| One of the following: |  |  |
| HIST | 101 | World Civilization to 1100 ............. 3 |
| HIST | 102 | World Civilization from 1100 to 1800 .. 3 |
| HIST | 103 | World Civilization since 1800........ 3 |
| Students are not allowed to count the same courses completed for general education requirements as course requirements in the Liberal Studies major, including those in concentrations. |  |  |
| Total General Education Required............................ 35 |  |  |
| LIBERAL STUDIES CORE REQUIREMENTS |  |  |
| Course |  | Titles Credits |
| ENGLISH (5 hours) |  |  |
| ENG | 351 | Children's Literature........................... 2 |
| ENG | 303 | Advanced Composition...................... 3 |
| FINE ARTS (3 hours) |  |  |
| One of the following (not completed for |  |  |
| General Education): |  |  |
| ART | 100 | Visual Dynamics ......................... 3 |
| MUS | 118 | Music Appreciation ...................... 3 |
| TH | 111 | Theatre Appreciation ................... 3 |
| MATH (9 hours) |  |  |
| MATH | 360 | Elem. Concepts of Mathematics I........ 3 |
| MATH | 361 | Elem. Concepts of Mathematics II ........ 3 |
| MATH |  | Problem Solving for Elementary <br> Teachers. $\qquad$ |
| MULTICULTURAL STUDIES (3 hours) |  |  |
| CS | 420 | Voices of Protest............................... 3 |
| (Other approved multicultural courses may be added) |  |  |
| SCIENCE (4 hours) |  |  |
| PHYS <br> CHEM | 150/ |  |
|  | 150 | Elementary Concepts in Physics and Chemistry $\qquad$ .4 |

SOCIAL SCIENCE (9 hours)
POLSC 101 American National Politics ..... 3
PSYCH 342 Educational Psychology ..... 3
One of the following: ..... 3
HIST 201 U.S. History I .....  3
HIST 202 U.S. History II ..... 3
Total Core Requirements ..... 33
REQUIRED CONCENTRATION IN DISCIPLINE AREA (12 HOURS)
Students are required to select one of the followingconcentration areas of 12 hours. All students should meetwith an advisor in the area of concentration and develop thegoals to be achieved by completion of the concentrationand the sequence of courses to achieve the goals.
ART
ART 211/or
212 History of Art I/II ..... 3
Studio Art Course ..... 3
Art courses numbered 300 or above ..... 6
CHICANO/A STUDIES
CS 101 Introduction to Chicano Studies ..... 3
9 hours selected from Chicano Studies courses, several of which are cross-listed with other departments; at least 6 hours must be numbered 300 or above. ..... 9
ENGLISH
ENG 201 Introduction to Literary Study ..... 3
9 hours, 3 hours of which must be in courses numbered 300 or above ..... 9
HEALTH
EXHP 162/L Personal Health/Lab ..... 4
EXHP 201 Drugs \& Healthy Lifestyles ..... 3
AT 232 First Aid ..... 2
EXHP 382 Lifestyle Disease Risk Reduction ..... 3
HISTORY
HIST 201/or
202 U.S. History I/II (whichever classnot completed in core)3
HIST 300 Historiography ..... 3
History courses numbered 300 or above ..... 6
LANGUAGE AND LINGUISTICS
ANTHR 106 Language Thought \& Culture ..... 3
ENG 352 English Syntax and Usage ..... 3
FL 100 Intro to Comparative Linguistics ..... 3
SPCOM 260 Language Acquisition and Linguistics .....  3

| LEADERSHIP |  |  |
| :--- | :--- | :--- |
| US | $160 \quad$ Introduction to Leadership ..................... 3 |  |
| US | 260 | Leadership in Service Organizations .... 3 |
| US | 360 | Applied Leadership............................. 3 |
| US | 460 | Working with Experienced Leaders .... 3 |

## SCIENCE

One Biology, One Chemistry, and One Physics Course and Labs; examples include:

| BIOL | 121/L | Environmental Conservation/Lab......... 4 |
| :---: | :---: | :---: |
| BIOL | 181/L | College Biology I/Organismal Bio/Lab .. 4 |
| BIOL | 206/L | Intro to Microbiology /Lab ................... 4 |
| CHEM | 101/L | Chemistry and Society/Lab................. 4 |
| CHEM | 111/L | Principles of Chemistry/Lab ................ 4 |
| CHEM | 121/L | General Chemistry I/Lab..................... 5 |
| PHYS | 110/L | Astronomy/Lab ................................ 4 |
| PHYS | 140/L | Light, Energy, and the Atom/Lab ......... 4 |
| PHYS | 201/L | Principles of Physics I/Lab.................. 4 |
| PHYS | 221/L | General Physics I/Lab ....................... 5 |
| SOCIOLOGY |  |  |
| SOC | 101 | Introduction to Sociology .................... 3 |
| 9 hours from the following; 6 must be upper division .... 9 |  |  |
| SOC | 105 | Understanding Human Diversity .... 3 |
| SOC | 155 | Minority and Ethnic Relations ........ 3 |
| SOC | 201 | Social Problems.......................... 3 |
| SOC | 206 | Gender and Society..................... 3 |
| SOC | 231 | Marriage \& Family Relationships ... 3 |
| SOC | 306 | Delinquency \& Juvenile Justice ..... 3 |
| SOC | 308 | Popular Culture........................... 3 |
| SOC | 354 | Urban Sociology ......................... 3 |
| SOC | 355 | Political Sociology....................... 3 |
| SOC | 356 | Social Stratification ...................... 3 |
| SOC | 403 | Human Sexuality and Social |
|  |  | Behavior .................................... 3 |
| SOC | 404 | Poverty ..................................... 3 |
| SOC | 407 | Family Violence .......................... 3 |

Required Concentration in Discipline Area ..... 12
(See concentrations listed above)
Elementary Education Requirements ..... 40
PROGRAM REQUIREMENT TOTAL ..... 120

## READING PROGRAM

## READING MINOR

The reading minor is intended for elementary, secondary, or K-12 teacher certification candidates who wish to have a recognized area of strength in the teaching of reading and other language arts.

## Expected Student Outcomes

As a result of successfully completing the reading minor, the student must be able to:

- Recognize, describe, diagnose, and teach all the generally accepted concepts, strategies and skills in the areas of oral language, reading readiness,
emergent literacy, word recognition, comprehension, interpretation, literary appreciation, reading for information, critical reading and thinking, reference skills, study skills, oral reading, listening, speaking, English language usage, syntax, grammar, punctuation, capitalization, creative and informative writing, spelling and penmanship;
- Describe the role and importance of the child's selfconcept, experience and culture, home language and dialect, stages of growth and development, and success and familiarity with literature as factors in motivating growth in reading and the language arts;
- Plan lessons and teach effectively using a variety of grouping techniques, including whole class, individual, ability, and cooperative;
- Locate and use a variety of materials to teach reading and the other language arts. The materials include textbooks, basal readers, trade and library books, teacher-made materials, computer programs, studentgenerated texts, centers, newspapers, and children's literature;
- Diagnose student reading levels and specific strengths and weaknesses, organize instruction to provide for the needs of the class and individual special students, adapt instruction in content areas to promote content learning, and develop reading and writing growth for all students;
- Recognize common causes of reading and writing difficulties and administer and interpret the scores of a variety of informal assessment techniques such as reading miscue inventories and norm-referenced standardized tests;
- Assess writing samples for diagnosis and prescription in expression, organization, fluency, sentence and paragraph development, theme, spelling, penmanship and fluency in work processing; and
- Explain the need to collaborate with parents, librarians, drama and other teachers to provide an effective language arts program.


## Outcomes Assessment Activities

Assessment activities conducted for the Reading minor include the following: a review of 1) scores on standardized tests of content knowledge related to literacy; 2) ratings of proficiency on program based on performance documented for standards in Goal 2 of students' eportfolios; and 3) self-evaluations/ratings of proficiency on program outcomes by program completers and graduates one year after teaching.

## Specific Requirements

Students must complete the reading core with a GPA of 3.00 or better and complete the reading electives with a cumulative GPA of 2.60 or better. RDG 301 or 425 are prerequisites for other reading courses. The minor requires completion of a minimum of 21 hours, 14 from
core courses and 7 hours chosen from available electives with consultation with an education advisor. Many electives are available only in summer sessions.

## Core Course Requirements

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ENG | 351/ | Children's Literature/Literature for Adolescents |  |
|  | 412 |  |  |
| RDG | 410 | Teaching Reading |  |
| RDG | 411 | Teaching Elementary Language Arts........ 2 |  |
| RDG | 435 | Content Area Literacy ............................. 4 |  |
| RDG | 450 | Diagnosis and Remediation of |  |
|  |  | Reading Problems |  |

$\overline{\text { CORE TOTAL } 14}$
Seven credits of electives from the following list: ............... 7

\left.| Courses | Titles | Credits |
| :--- | :--- | :--- |
| BBE 420 | Literacy for EL Learners......................... 3 |  |$\right\}$

## Higher Education Act (HEA) Reporting Requirements

In October 1998, Congress enacted Title II of the Higher Education Act (HEA), requiring new reporting requirements for institutions and states on teacher preparation and licensing. Section 207 of Title II requires the annual preparation and submission of a report by each university that prepares teachers on how well individuals who complete its teacher preparation program perform on initial state licensing and certification assessments in their areas of specialization. Universities are also required to publish information on basic aspects of their programs, such as number of students, amount of required supervised practice teaching, and the student-faculty ratio in supervised practice teaching. Information on students who completed CSU-Pueblo's teacher education program during 2012-2013 can be found on the program's website: http://ceeps.colostate-pueblo.edu/TEP/Pages/default.aspx

## COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

Dr. Roy Sonnema, Dean

## Academic Departments/Programs

| Art |  |
| :---: | :---: |
| Major: | Art (BA, BFA) <br> Emphasis Areas: <br> Art Education K-12 (BA) <br> Art History (BA) |
| Minor: | Art |
| Chicanola Studies Program |  |
| Minor: | Chicano Studies |
| Certificate: Diversity Studies |  |
| English/Foreign Languages |  |
| Majors: | English (BA) <br> Emphasis Areas: <br> Creative Writing <br> Secondary Teaching Endorsement <br> Foreign Language-Spanish (BA) |
| Minors: | Creative Writing <br> English <br> French <br> Italian <br> Professional Writing <br> Spanish |
| History/Political Science/Philosophy/Geography |  |
| Majors: | History (BA, BS) <br> Emphasis Area: <br> History Secondary Education (BS) <br> History (M.A.) <br> (See Graduate Programs section of catalog) <br> Political Science (BA, BS) <br> Emphasis Area: <br> Secondary Education |
| Minors: | History <br> Homeland Security <br> Philosophy <br> Political Science |
| Certificate: Homeland Security Studies |  |

Mass Communication and Center for New Media

Major: Mass Communications (BA, BS) Emphasis Areas: Electronic Media Integrated Communication Journalism

Minor: Mass Communications
Military Science ROTC Program
Minor: Military Science

Music
Major: Music (BA)
Emphasis Areas:
Music Education K-12
Music Performance

Minor: Music

## Non-Profit Administration

Minor: Non-Profit Administration
Psychology
Major: Psychology (BA, BS)
Minor: Psychology
Social Work
Major: Social Work (BSW)
Sociology/Anthropology/Social Science
Majors: Sociology (BA, BS)
Emphasis Area:
Criminology
Social Science (BA, BS)
(Offered through Continuing Education only)
Minors: Anthropology
Sociology
Social Science (offered through Continuing Education only)

## Women's Studies

Minor: Women's Studies

## Mission

The mission of the College of Humanities and Social Sciences is to help students develop critical thinking skills, aesthetic awareness, and ethical perspectives, to provide them with the tools and expertise necessary to function as responsible citizens and professionals and to engage in intellectual and artistic pursuits. Faculty members are committed to high quality teaching, theoretical and applied research, scholarship, creativity, to effective service to the University, the profession, and the region, and to the innovative use of technology in these endeavors. The college strives to be a community of learners, teachers, and scholars responsive to the challenges of a diverse society, a vulnerable environment, and an increasingly technological and interdependent world.

## Graduation Requirements

In addition to requirements for the major and general education, students must complete either A) any minor degree program listed in the catalog other than their major; or B) 18 hours of credit outside their major (courses must have a different prefix than their major). Students may not use the same credits to satisfy requirements for both the major and minor degrees. Students may not use credits taken to satisfy general education to count toward their required 18 hours.

## The Anthony T. and Theresa H. Capps-Capozzolo Center for the Creative and Performing Arts

The Anthony T. and Theresa H. Capps-Capozzolo Center for the Creative and Performing Arts is an interdisciplinary academic unit within the College of Humanities and Social Sciences. In accordance with the intent of Anthony Capozzolo's generous gift to the University, the center's mission is to promote and enhance the visual arts, music, dance, and theater through academic programs, course offerings, scholarships, special events, and related activities that contribute to student learning and appreciation for the creative and performing arts at CSUPueblo.

## ART DEPARTMENT

## Department Chair: William Folkestad

Faculty: Aviña, Dalton, Folkestad, R. Hansen, V. Hansen, Johnson, Peters

The art curriculum is designed to aid and promote exploration of art-making processes and to increase the student's understanding of art and its relationship to society. The art major prepares the student to be a practicing artist, to enter graduate school for further
professional education or to enter the job market in artrelated careers. Students also may select art courses as a means of achieving a greater sense of personal creativity and accomplishment. Students, faculty, and invited professional artists display works in the CSU-Pueblo Art Gallery. An active visiting artist program provides contact with successful regional and national professionals.

The major in art leads to the degrees of Bachelor of Arts (BA) or Bachelor of Fine Arts (BFA). A minor in art is also available.

The department aims to provide art facilities, a creatively active faculty, and an engaging curriculum in a variety of emphasis areas. While at CSU-Pueblo, students mature as artists and integrate their knowledge in broad ways to fulfill their creative and professional lives.

## General Program Requirements

- The art faculty firmly believes that a quality undergraduate art program must be built from the strong foundation of basic concepts and techniques provided by the required ART CORE courses. Art history, drawing and design combined with an introduction to the basic art processes, provide the necessary background of information and skills for individual artistic growth and maturity. A strong grounding in the fundamentals of art, as provided in the ART CORE, indicates the department's insistence upon respect for and commitment to the academic discipline of art as a professional career.
- Art majors must complete the required courses known as the ART CORE, before proceeding into the beginning courses.
- No grade lower than a C will count toward either an art major or minor.
- BFA candidates must maintain a 3.0 in the art major.
- Students are required to take 30 hours of major courses in residency.


## Core Requirements for the Art Major

## Art Core Courses

## ART Courses Titles <br> Credits

ART 110 Art Career Orientation .......................... 1
ART 115 Two-Dimensional Design...................... 3
ART 116
ART 141
ART 211
ART 212
ART 242 Drawing II ............................................. 3


| ART | 411 | Twentieth-Century Art............... 3 |
| :---: | :---: | :---: |
| ART | 412 | Contemporary Art .................... 3 |
| ART | 491 | Special Topics ......................... 1-3 (selected topics in Art History) |
| ART | 310 | Portfolio Review................................ 1 |
| Three credits from the following Non-Western Art |  |  |
| History courses: ...................................................... 3 |  |  |
| ART | 413 | Native American Art................. 3 |
| ART | 414 | Asian Art................................ 3 |
| ART | 415 | Latin American Art................... 3 |
| ART | 410 | Senior Career Orientation $\qquad$ (last spring semester) |
|  |  | TOTAL 50 |
| Specific Requirements for BA Degree Art Education |  |  |
| K-12 Emphasis |  |  |
| ART Courses |  | Titles Credits |
| Required Art Core ................................................... 19 |  |  |
| ART | 234 | Painting I ........................................ 3 |
| ART | 247 | Ceramics I....................................... 3 |
| ART | 270 | Printmaking I .................................... 3 |
| ART | 276 | Photography .................................... 3 |
| ART | 281 | Intro to Graphic Design I.................... 3 |
| ART | XXX | Upper Division Art History Course ........ 3 |
| ART | 310 | Portfolio Review............................... 1 |
| ART | 410 | Senior Career Orientation $\qquad$ . (last spring semester before student teaching) |
| ART Upper Division Electives |  |  |

TOTAL 51

There are additional licensure requirements; consult the Teacher Education Program for details.

## Specific Requirements for the BFA Degree Art Major

ART Courses Titles Credits
Required Art Core ........................................................... 19
Studio Explorations ........................................................ 9
(Select 3 courses for a total of 9 semester hours from the following list:)

ART 233 Sculpture I

3

ART 234 Painting I ........................................ 3
ART 247 Ceramics I..................................... 3
ART 270 Printmaking I.................................. 3
ART 274 Digital Art I..................................... 3

| ART | 276 | Photography .............................. 3 |
| :---: | :---: | :---: |
| ART | 281 | Intro to Graphic Design I............... 3 |
| ART | 291 | Special Topics ............................ 3 |
| Professional Development |  |  |
| ART | 310 | Portfolio Review................................ 1 |
| ART | 410 | Senior Career Orientation $\qquad$ (last spring semester) |
| Art History |  |  |
| ART | 411 | Twentieth-Century Art........................ 3 |
| ART | XXX | Upper Division Art History................... 3 |
| PLUS |  |  |
| ART Upper Division Electives ......................................... 15 ART Upper Division Studio Emphasis Area ..................... 15 |  |  |
|  |  |  |
|  |  | TOTAL 66 |
| Specific Requirements for the Art Minor |  |  |
| ART | urses | Titles Credits |
| ART | 5 or 116 | Two or Three-Dimensional Design...... 3 |
| ART | 1 or 242 | Drawing I or II ................................. 3 |
| ART | 1 or 212 | History of Art I or II........................... 3 |
| ART Electives (approved by minor advisor) .................. 12 |  |  |
|  |  | TOTAL 21 |

## Co-curricular requirements

The faculty supports and encourages the involvement of art majors and minors in the Art Club and related activities specific to each studio.

## Department of Art Student Learning Outcomes and Assessment Activities

1) Students will apply discipline-specific competencies for success in their emphasis area.

- Outcome Assessment Activity: ART 410 with exit survey

2) Students will distinguish the role of art in a global society.

- Outcome Assessment Activity: Senior portfolio with exit survey and art history rubric to measure quality of written expression

3) Students will employ creative skills associated with interdisciplinary learning.

- Outcome Assessment Activity: ART 410 with exit survey

4) Students will make use of intellectual and practical skills for lifelong learning.

- Outcome Assessment Activity: Internships with employee surveys

5) Students will create original work suitable for entry into a juried exhibition.

- Outcome Assessment Activity: Annual juried art show and any non-juried student on-campus shows

6) Art education students will be able to apply the knowledge and skills needed to help children learn to create and appreciate art.

- Outcome Assessment Activity: PLACE test in addition to other BA measurements


## CHICANO/A STUDIES PROGRAM

The Chicano/a studies minor complements majors and careers in law, sociology, social work, languages, education, government, business and other disciplines. Courses offer unique undergraduate preparation for those who seek entrance to graduate studies in law, humanities or the social sciences.

Students who plan to live and work in the American Southwest or aspire to careers that involve relations in the American continents are likely to be well served by Chicano/a Studies courses. The interdisciplinary approach emphasizes history and cultural studies, and selected courses provide the student with in-depth knowledge of specific aspects of the Chicano/a community.

## Program Goals

- To provide individual courses as well as a minor to fulfill the unique role and mission of Colorado State University-Pueblo.
- To offer an individually designed minor in support of students' majors.


## Student Learning Outcomes

Students will be able to:

- Critically examine the social, historical, and cultural relevance of Chicanos within the United States and the US/Mexico borderlands.
- Analyze the complexities of Chicano identity.
- Evaluate the contributions of women within Chicano history.
- Examine and interpret how Chicanos have impacted the culture, politics, and history of Southern Colorado.

Student learning outcomes will be included in the academic catalog, the website, and the syllabus for the capstone course.

## General Requirements

- Students must earn a C or better in all courses applicable to the minor.


## Specific Requirements for the Chicano/a Studies Minor

Twenty-four hours: 15 required 9 elective. The following five courses are required:


Electives may be selected from Chicano/a studies courses, several of which are cross-listed with other departments, or by approval of the Chicano/a studies coordinator, from courses in such areas as Spanish, history, psychology, sociology, and social work, among others.

| CS Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| CS/ENG | 220 | Survey of Chicano Literature |  |
| CS/SW | 230 | Chicano: Social and Psych Study. |  |
| CS | 235 | Ballet Folklorico |  |
| CS | 291 | Special Topics . | 1-3 |
| CS | 303 | Chicano Labor History in the U.S | .... 3 |
| CS/SW | 325 | Health in the Chicano Community | ......... 3 |
| CS/WS | 341 | Chicana Writers |  |
| CS | 420 | Voices of Protest |  |
| CS/WS | 401 | Third World Feminism |  |
| CS/HIST | 489 | Borderlands |  |
| CS | 491 | Special Topics . | 1-3 |
| CS | 495 | Independent Study | ...1-3 |
| CS | 498 | Internship... | ...1-3 |

## Outcomes Assessment Activities

- An annual review of student's capstone projects is conducted to evaluate the programs goals and student learning outcomes.
- The program is developing a means of measuring student's progress in core courses.


## Performance Criteria

Upon completion of the minor students are to submit a copy of their capstone project to the coordinator and two individuals chosen by the dean to review their capstone project to see if it fits the goals and SLOs of the program. A total of $80 \%$ of the students should have met the outcomes and goals of the program. Papers will be assessed every spring.

## DIVERSITY STUDIES CERTIFICATE PROGRAM

The Diversity Studies Certificate Program is a 15 -credit hour certificate program housed in the College of Humanities and Social Science (CHASS) under the directorship of the Chicano Studies and/or Women's Studies Coordinator. This certificate allows student to prepare for the cultural and social diversity of the world in which they will live and work.

Students will also learn the process and value of social justice, equality, cultural awareness, and the history of exclusion and inclusion while implementing the proper frameworks for behaving toward others in regards to race, ethnicity, class, gender, etc.

Upon completion of this certificate, students will have developed application based training alongside theoretical awareness, and practical knowledge to thrive in diverse environments. They will be better prepared to address their respective community's needs, and to assume leadership roles in their field of specialization with consideration to issues revolving around diversity and cultural awareness.

The University does not transcript certificates, so records of the Diversity Studies Certificate Program and the issuance of the certificate are administered by the director of the Chicano Studies and/or Women's Studies Coordinator.

## Student Learning Outcomes

- Illustrate the diverse approaches to and complexities of multiculturalism.
- Identify the ways in which minorities have shaped the culture, politics, and history of the United States.
- Demonstrate a critical understanding of ethnic, racial, gender, and class intersections from local, national, and global perspectives.
- Apply the basic concepts, theories and methods in gender, ethnic, and multicultural studies in local, national, and global contexts.


## Outcomes Assessment Activities

- An annual review of student's capstone projects is conducted to evaluate the programs goals and student learning outcomes.


## Requirements for Admission to the Program

Enrolled students at CSU-Pueblo may apply to enter the certificate program at any point up to their third year, and complete it during their remaining time at CSU-Pueblo.

Non-degree students could also apply for the program after passing one of the required admission courses (see below) and other lower division courses that would adequately prepare them for upper-division coursework.

## Specific Requirements for the Diversity Studies Certificate

Students are required to complete 15 credits for the certificate program. Up to 3 credits could be counted dually. Students would choose courses under the direction of an advisor.

Students will be required to take at least one of the following courses before they begin the certificate program: $\qquad$3

| CS | 101 | Introduction to Chicano Studies ..... 3 |
| :--- | :--- | :--- |
| SOC | 155 | Minority and Ethnic Relations ....... 3 |
| SOCSC | 209 | African American Studies ........... 3 |
| WS | 100 | Introduction to Women's Studies ... 3 |

One course in Understanding Human Diversity 3 (select from the following)

ENG/SPCOM/WS
335 Gender and Communication.......... 3
ENG 345 Multiculturalisms in America .......... 3
WS 301 Theories of Gender and Culture .... 3
One Comparative course: (select from the following)........ 3
CS/WS 401 Third World Feminisms ................... 3
CS 420 Voices of Protest............................. 3
CS/HIST 489 Borderlands .................................... 3
HIST/SOC/WS
428 Women \& Work . 3
WS/SOC 453 The Sociology of the Body............. 3
WSISOC 455 Hate Crimes.................................... 3
One elective course (3 credits) chosen from the
Academic Catalog in consultation with the certificate coordinator/advisor: 3

DS 485 Capstone ............................................. 3
TOTAL 15

## ENGLISH/FOREIGN LANGUAGES DEPARTMENT

Department Chair: Cynthia Taylor

Faculty: Arnegard, Cobián-Klein, Eskew, Furrh, Gage, Montoya, Morales, Picicci, Ribadeneira, Rodríguez-Arenas, Rueda Mesa, Souder, T. Taylor

## ENGLISH PROGRAM

The major in English leads to a Bachelor of Arts (BA) degree and provides graduates with an understanding of language and literature as a basis for aesthetic, ethical, social, and academic ways of thinking, creating, and researching. The goal of the program is to develop general communication and learning skills and an understanding of the value of ongoing critical reading, thinking, and writing. Critical, analytical, and composition skills, which provide excellent preparation for professional careers in teaching, writing, editing and publishing, business, media, public service, law, and the arts are emphasized.

## Student Learning Outcomes

Upon completion of the B.A. in English program, students will:

- Demonstrate knowledge of significant traditions, historical and cultural contexts, and current issues in literature and language studies.
- Conduct, analyze, evaluate, and integrate academic research.
- Apply strategies of critical theory.
- Analyze literature and synthesize ideas with clarity, accuracy, and coherence in speech and writing.
- Use a range of English syntactic structures effectively.
- Construct a convincing argument using a range of rhetorical strategies in speech and writing.

Students completing the B.A. in English program and a creative writing emphasis will also:

- Demonstrate a working vocabulary for critical analysis through theoretical venues as well as in-depth study of terminology and form within creative works to develop strong critiquing skills in the workshop environment.
- Produce writing competitive at a publishable level, which reflects an understanding of the creative writing genres, the business of writing, and the drafting and revision process for individual and collections of works.


## Requirements for the English Major

- Specific requirements for the English major are listed below. Students should consult with an advisor in English before registration.
- Students must complete, with a grade of $C$ or better, all courses counting toward the major or minors.
- Students must fulfill the University language requirements for the BA degree, first year foreign language ( $6-8$ credit hours) OR English 106 (3 credit hours) and Foreign Language 100 (3 credit hours) OR SPCOM 116 and 216. For International students,

English 101 and 102 fulfill the Foreign Language Requirement.

## Requirements for the English Minor

- Minor requirements are 20 or more semester credit hours of course work in English numbered 106 or above, of which 12 must be upper division. Courses must be chosen in consultation with an advisor in English.
- Students must complete, with a grade of C or better, all courses counting toward the major or minors.
- For teaching endorsement requirements, see the Teacher Education Program section.


## Co-curricular Requirements

The English faculty supports and encourages English majors' involvement in student organizations and participation in tutoring activities in the community and on campus.

## Outcomes Assessment Activities

Assessment of the English program is the responsibility of all English Program faculty. The English Program's annual reports evaluating the program and proposing any needed changes are compiled from the following information:

- A central file of course syllabi with representative assignments is maintained by the department for inspection by the committee and other qualified persons.
- Faculty advisors monitor each student's progress toward completing major requirements listed in the catalog.
- All English majors take a senior-year seminar (English 493) emphasizing professional standards and synthesizing the writing and analytical skills students have acquired in other English classes. All students in English 493 write a senior research paper, one copy of which is submitted to the department chairperson for dissemination for review. In order to pass English 493, students must demonstrate satisfactory levels of achievement in meeting the program goals.
- English Program faculty review the papers from English 493 on an annual basis and prepare an analysis of what they reveal about the program's success.
- The English Program administers a studentsatisfaction questionnaire to all senior English majors each year. Similar questionnaires are sent to recent graduates and representative employers on a periodic basis.
- The English Program faculty consider the English curricula at leading comparable institutions and apprise the department of innovations worthy of consideration.


## ENGLISH MAJOR

- Faculty advisors meet individually with each of their students on a regular basis to help plan schedules and discuss educational and career goals. Advisors maintain an accurate and up-to-date record of each student's progress towards completion of the requirements for the major.
- All English majors will participate in a senior-year seminar in which all of the writing and analytical skills acquired in other English classes will be synthesized. Students in the class will be expected to complete a senior research project.


## Specific Requirements for the Bachelor of Arts in English

A total of 45 credits in English beyond 101 and 102 (FL 100 and ENG 106 may be counted, but not double counted for Foreign Language), distributed as follows:

| ENG Courses | Titles | Credits |
| :---: | :--- | :--- |
| ENG 201 | Introduction to Literary Study............. 3 <br> (To be taken at or near the start of <br> the program) |  |
| ENG 493 | Senior Seminar..................................... 3 <br> (To be taken at or near the end of <br> the program) |  |

One of the following courses in Genres: .3
ENG 307 Poetry
ENG 308 Fiction
ENG 309 Drama
ENG 310 Advanced Literary Forms \& Genres
At least three courses in Literature in Historical Perspective, chosen with the approval of the major advisor, two of which must comprise a sequence of American or British literature at the 200 level (i.e., ENG 210 and ENG 212 or ENG 231 and ENG 232), while the third must be at the 300 level or above. .. 9

At least two courses in Major Writers, at least one of which must be in Shakespeare

At least one course in Literary Theory .............................. 3
At least one course in Writing, beyond ENG 101 and 102 .... 3
At least one course in The English Language and Linguistics (FL 100 and ENG 106 may be counted, but not double counted for Foreign Language).

At least 14 credits of English electives, chosen with the approval of the major advisor (General Education and Foreign Language requirements may not be double counted).

## Specific Requirements for the Bachelor of Arts in English with Creative Writing Emphasis

A total of 45 credits in English beyond 101 and 102 (FL 100 and ENG 106 may be counted, but not double counted for Foreign Language), distributed as follows:

| ENG Courses | Titles | Credits |
| :--- | :---: | :--- |
| ENG | 201 | Introduction to Literary Study ................ 3 |
| ENG | 114 | Introduction to Creative Writing .......... 3 <br> (To be taken at or near the start of <br> the program) |
| ENG | 414 | Advanced Writing Workshop ................. 3 |
| ENG | 493 | Senior Seminar............................. 3 <br> (To be taken at or near the end of <br> the program) |

One of the following courses in Genres: ........................... 3
ENG 307 Poetry
ENG 308 Fiction
ENG 309 Drama
ENG 310 Advanced Literary Forms \& Genres
At least three courses in Literature in Historical Perspective, chosen with the approval of the major advisor, two of which must comprise a sequence of American or British literature at the 200 level (i.e., ENG 210 and ENG 212 or ENG 231 and ENG 232), while the third must be at the 300 level or above .. 9

At least two courses in Major Writers, at least one of which must be in Shakespeare .. 6

At least one course in Literary Theory .............................. 3
At least one course in The English Language and Linguistics (FL 100 and ENG 106 may be counted, but not double counted for Foreign Language)

At least two credits of English electives, chosen with the approval of the major advisor (General Education and Foreign Language requirements may not be double counted).

Courses in Writing as follows:
Three of the following courses .......................................... 9
ENG 315 Creative Writing: Poetry
ENG 316 Creative Writing: Fiction
ENG 317 Creative Nonfiction
ENG 318 Creating Writing: Drama

## Specific Requirements for the Bachelor of Arts in English with Secondary Teaching Endorsement

A total of 45 credits in English beyond 101 and 102 (FL 100 and ENG 106 may be counted, but not double counted for Foreign Language), distributed as follows:

| ENG Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ENG | 201 | Introduction to Literary Study. (To be taken at or near the sta the program) | $3$ |
| ENG | 493 | Senior Seminar $\qquad$ (To be taken at or near the the program) |  |
| One of the following courses in Genres: ........................ 3 |  |  |  |
| ENG | 307 | Poetry |  |
| ENG | 308 | Fiction |  |
| ENG | 309 | Drama |  |
| ENG | 310 | Advanced Literary Forms \& |  |
| At least four courses in Literature in Historical |  |  |  |
| Perspective, chosen with the approval of the major advisor, two of which must be the American literature sequence at the 200 level (i.e., ENG 210 and ENG |  |  |  |
| 212), one of which must be one 200 level course in the British literature sequence (either ENG 231 or |  |  |  |
| ENG 232), while the fourth must be outside of |  |  |  |

Major Writers: Shakespeare ..... 3
At least one course in Literary Theory ..... 3
At least two courses in Writing, beyond ENG 101 and102, one of which must be ENG 3036
All of the following courses

| ENG | 352 | English Syntax and Usage ................... 3 |
| :--- | :--- | :--- |
| ENG | 412 | Literature for Adolescents..................... 2 |
| ENG | 452 | History of the English Language......... 3 |

At least 4 credits of English electives, chosen with the approval of the major advisor (General Education and Foreign Language requirements may not be double counted)

TOTAL 45

## CREATIVE WRITING MINOR

The Creative Writing Minor is designed for students interested in pursuing an MFA in creative writing or students who wish to continue their creative activity after graduation. Since MFA degrees specialize in poetry, playwriting, creative nonfiction, or fiction, students will complete 21 credits of coursework concentrating on one genre while also establishing knowledge of the creative
writing workshop, the drafting/revision process, and the business of writing.

## Student Learning Outcomes

- Students will demonstrate a working vocabulary for critical analysis through theoretical venues as well as in-depth study of terminology and form within creative works to develop strong critiquing skills in the workshop environment.
- Students will produce writing competitive at a publishable level, which reflects an understanding of the creative writing genres, the business of writing, and the drafting and revision process for individual and collections of works.


## Outcome Assessment Activities

The Coordinator of the Creative Writing minor reviews student portfolios to evaluate student performance levels in conjunction with Program Goals, tracks student placement in graduate programs, and records student and former student publications, reporting the result annually.

## Specific Requirements for the Creative Writing Minor

| Required Core | Courses .................................................. <br> Introduction to Creative Writing |  |
| :--- | :---: | :--- |
| ENG | 114 | In <br> (to be taken at the start of the minor) |
| ENG | 201 | Introduction to Literary Study <br> OR |
| ENG | 310 | Advanced Literary Forms \& Genres <br> ENG 414 | | Advanced Writing Workshop |
| :--- |
| (to be taken at the end of the minor) |

One of the selected pairs .................................................. 6
ENG 307 Poetry

ENG 315 Creative Writing: Poetry

| ENG | 308 | Fiction |
| :--- | :--- | :--- |
| ENG | 316 | Creative Writing: Fiction |
|  |  |  |
| ENG | 308 | Fiction |
| ENG | 317 | Creative Nonfiction |
|  |  |  |
| ENG | 309 | Drama |
| ENG | 318 | Creative Writing: Drama |

Electives (if not used above)............................................... 6
CS/ENG 220 Survey of Chicano Literature
ENG 240 Survey of Ethnic Literature
ENG 310 Advanced Literary Forms \& Genres
ENG 315 Creative Writing: Poetry
ENG 316 Creative Writing: Fiction
ENG 317 Creative Nonfiction
ENG 318 Creative Writing: Drama
ENG 319 Professional Editing

| ENG | 325 | Nature Writing in the West |
| :--- | :--- | :--- |
| ENG | 326 | Writing for the WEB |
| ENG/WS 340 | Women in Literature |  |
| ENG | 345 | Multiculturalisms in America |
| ENG | 352 | English Syntax and Usage |
| ENG | 385 | Literacy Criticism and Theory |
| ENG | 452 | Novels into Film 1740-Present |
| ENG | 491 | Special Topics <br> (with advisor's approval) <br> CSNS <br> 341 |
| Chicana Writers |  |  |
| MCCNM | 233 | Script Writing |
| MCCNM | 304 | Feature Writing |

## TOTAL 21

## PROFESSIONAL WRITING MINOR

The English program coordinates a minor in professional writing (20 hours), designed to provide students with the practical and theoretical knowledge necessary either to pursue careers in professional writing or to pursue postgraduate education in fields including, but not limited to, rhetoric and composition, technical communication, and media studies. Students who choose this minor will be required to take a set of core courses focused on developing rhetorical awareness and ability, especially as applied to professional writing situations, In addition to the core courses that make up the minor, students can choose elective courses that relate to their professional writing interests, such as editing, magazine production, technical writing, and many others.

## Student Learning Outcomes

The Professional Writing minor emphasizes equipping students with both the practical and theoretical skills necessary to create documents in any professional environment or workplace setting. As such, students who complete a professional writing minor should be able to:

- Demonstrate an understanding of the standards and expectations for documents employed in professional settings.
- Create rhetorically effective documents in a variety of media, ranging from standard prose, to video, and to other digitally-based media.
- Apply rhetorical theory and history to analyze and address the rhetorical situation for professional writing in multiple genres with diverse audiences and purposes.
- Work collaboratively with peers to successfully complete projects modeled on workplace needs and scenarios.
- Display a sensitivity to the ethical and cultural issues that professional writers are likely to encounter in the workplace.


## Outcomes Assessment Activities

The Coordinator of the Professional Writing minor reviews student portfolios and evaluates the demonstrated level of student performance, tracks the placement of students in internships and relevant positions of employment, and administers a questionnaire to graduating minors keyed to the program's goals and reports these results annually.

## Specific Requirements for the Professional Writing Minor

| Required Core Courses |  |  |  |
| :---: | :---: | :---: | :---: |
| ENG | 161 | Careers for English Majors | 1 |
| ENG | 304 | History and Theory of Rhetoric | 3 |
| ENG | 326 | Writing for the WEB | 3 |
| ENG | 404 | Writing in the Professions | 3 |
| ENG/MCCNM |  |  |  |
|  | 440 | Magazine Writing |  |
|  |  | OR |  |
| ENG | 317 | Creative Nonfiction | 3 |
| ENG | 461 | Careers for English Majors | 1 |

Elective Courses, selected under the direction of advisor from following list: .6

ENG $305 \quad$| Technical and Scientific Report |
| :--- |
|  |
|  |
|  |
| Writing ........................................... 3 |

ENG 306 Visual Rhetoric............................... 3
ENG 319 Professional Editing....................... 3
ENG 325 Nature Writing in the West............. 3
ENG 345 Multiculturalisms in America .......... 3
ENG 445 Magazine Editing and Production .. 3

$$
\text { TOTAL } 20
$$

## FOREIGN LANGUAGES PROGRAM

Associate Department Chair: Dr. Alegria Ribadeneira

The Foreign Languages Program offers a Bachelor of Arts in Spanish (BA) intended to prepare students for the many careers where educated bilingual speakers are highly valued, for admission to graduate school, and for public school teaching and certification.

Minors in French, Italian, and Spanish complement a wide variety of majors in other disciplines to enhance the students' ability to compete for jobs where knowledge of a foreign language is desirable.

Courses in German, Russian, and Comparative Linguistics (listed under FL) are offered as permitted by enrollment. Student exchanges with foreign universities and other study-abroad programs are encouraged.

## Student Learning Outcomes for Spanish Majors

Spanish Majors will achieve a level of proficiency in Spanish communication skills (listening, speaking, reading, and writing) and in the understanding of Hispanic cultures sufficient to allow them to function effectively in careers in teaching, business, the media, government, the arts, etc.

These outcomes will be achieved by showing proficiency in the 5 C's:

1) Communication: The communication standard stresses the use of Spanish for communication in —r\#l life" situations. It emphasizes -wat students can do with language" rather than what they know about language." Students are asked to communicate in oral and written form, to interpret oral and written messages, to show cultural understanding when they communicate, and to present oral and written information to various audiences for a variety of purposes.
2) Cultures: Cultural understanding is an important part of Spanish language education. Experiencing other cultures develops a better understanding and appreciation of the relationship between languages and other cultures, as well as the student's native culture. Students become better able to understand other people's points of view, ways of life, and contributions to the world.
3) Connections: Spanish-language instruction must be connected with other subject areas. Content from other subject areas is integrated with Spanishlanguage instruction through lessons or courses that are developed around themes common to other subject areas.
4) Comparisons: Students are encouraged to compare and contrast Spanish language and cultures with their own. They discover patterns, make predictions, and analyze similarities and differences across languages and cultures. Students often come to understand their native language and culture better through such comparisons.
5) Communities: Extending learning experiences from the Spanish-language classroom to the home and multilingual and multicultural community emphasizes living in a global society. Activities may include: field trips; use of e-mail and the Internet; participation in clubs, exchange or study-abroad programs, and cultural activities; school-to-work opportunities; and opportunities to hear speakers of Spanish at the University and in the classroom.

## Student Learning Outcomes for Minors in Spanish, French and Italian

Students minoring in French, Italian, and Spanish will be required to demonstrate a level of proficiency sufficient to converse comfortably on everyday topics, to attain
intermediate levels of proficiency in writing and reading the target language, and to understand and appreciate the target language cultures.

NOTE: Majors or minors who fail to complete a course with a grade of $C$ or better are required to repeat the course with a satisfactory grade before proceeding to more advanced offerings.

## Placement in the Spanish course sequence:

1. Students who have taken no Spanish in high school or at another institution of higher learning begin with SPN 101.
2. Students, who have taken Spanish in high school, but not at another institution of higher learning, must take a placement exam to determine their proper placement.
3. Heritage Spanish speakers (that is, students who speak Spanish at home to a greater or lesser extent), students with significant Spanish immersion experience, and students who have taken Spanish courses at other institutions of higher learning must meet with a Spanish advisor in order to determine correct placement. The advisor will place the student based on any of the following or a combination thereof: an oral interview, a placement exam, a written composition.

## Specific Requirements for the Spanish Major

In addition to the courses listed below, Spanish majors must also meet the following requirements:

1. A senior assessment portfolio.
2. A minor or a second major.
3. Completion of the oral and written proficiency exams and of the graduating-senior survey.
4. At least one upper-division SPN course must emphasize Latin America, one Spain.

Study abroad is strongly encouraged, especially for students planning to teach.

```
SPN Courses Titles Credits
SPN 101 Beginning Spanish I ............................. 3
SPN 102 Beginning Spanish II ............................. }
SPN 201 Intermediate Spanish I .......................... }
SPN 202 Intermediate Spanish II ......................... }
SPN 203 Intermediate Proficiency Building ............ }
SPN 300 Spanish Phonetics and Phonology........... }
SPN 301 Advanced Spanish Grammar ................. }
Two of the following courses.......................................... }
SPN 302 Conv & Comp: Mexico & Central America
SPN 303 Conv & Comp: South America
SPN 304 Conv & Comp: Caribbean
SPN 305 Conv & Comp: Spain
```

| SPN | 306 | Conv \& Comp: United States |
| :--- | :--- | :--- |
| SPN | 331 | Spanish in the Business World |
| SPN | 391 | Special Topics |

And all of the following:3
Three upper-level electives, of which at least two must be 400-level ..... 9
TOTAL ..... 39
General Education ..... 35
Spanish Major ..... 39
Minor, Second Major, or Teacher Ed ..... 20-37
Electives ..... 9-26
Total ..... 120
Specific Requirements for the Spanish Minor
SPN Courses Titles Credits
SPN 101 Beginning Spanish I ..... 3
SPN 102 Beginning Spanish II ..... 3
SPN 201 Intermediate Spanish I ..... 3
SPN 202 Intermediate Spanish II ..... 3
SPN 203 Intermediate Proficiency Building ..... 3
SPN 300 Spanish Phonetics and Phonology. ..... 3
SPN 301 Advanced Spanish Grammar .....  3
One other 300- or 400-level SPN course ..... 3
TOTAL ..... 24
Specific Requirements for the French Minor
FRN Courses Titles Credits
FRN 101 Beginning French I .....  3
FRN 102 Beginning French II ..... 3
FRN 201 Intermediate French I ..... 3
FRN 202 Intermediate French II ..... 3
French Electives above 300* ..... 9

* (in house or through study abroad program)
TOTAL 21
Specific Requirements for the Italian Minor
ITL Courses TitlesITL 101 Beginning Italian I...................................... 3
ITL 102 Beginning Italian II ..... 3
ITL 201 Intermediate Italian ..... 3
ITL 202 Intermediate Italian II. ..... 3
Italian Electives above 300* ..... 9
* (in house or through study abroad program)
TOTAL 21


## Outcomes Assessment Activities

Assessment of the foreign languages program is the responsibility of the Foreign Languages Program Assessment Committee, consisting of the Associate Chair for Foreign Languages and three other faculty members. The committee's annual reports evaluating the program and proposing any needed changes are compiled from the following information:

- A central file of course syllabi with representative assignments is maintained by the department for inspection by the committee and other qualified persons.
- Faculty advisors monitor each student's progress towards completing major requirements and meeting the program goals listed in the catalog. Advisors report any problems or deficiencies in the program encountered by the students to the program assessment committee through the associate chair.
- All Spanish majors produce a senior assessment portfolio emphasizing professional standards and sharpening the proficiency skills students have acquired in their Spanish courses. Students work in conjunction with an advisor to complete the project and submit it to the Program Assessment Committee for review.
- Oral and written exit exams evaluate proficiency in listening, speaking, reading, and writing as well as understanding of Hispanic culture.
- The Program Assessment Committee reviews the senior portfolios and the results of the exit exam on an annual basis and prepares an analysis of what is revealed about the program's success.
- The Program Assessment Committee administers a student-satisfaction questionnaire to all senior foreign languages majors and minors each year. A similar questionnaire is sent to recent graduates on a periodic basis.
- The Program Assessment Committee monitors the foreign languages curricula at leading comparable institutions and apprises the department of innovations worthy of consideration.


## HISTORY/ POLITICAL SCIENCE/ PHILOSOPHY/GEOGRAPHY DEPARTMENT

Department Chair: Colette Carter

Faculty: Berardi, Carter, Conrad, Epps, Harris, Johnson, Loats, Montoya, O'Connor, Rees, Stroud, Vance

The programs in history, political science, philosophy, and geography are intended to provide domains of study both
for students who desire knowledge for personal enrichment and for students who desire to apply knowledge toward career objectives. Students who major or minor in the fields of the department should expect to develop and refine knowledge of other cultures and the historical and political development of the modern world. Students should also expect to engage in methodical research. Other expectations of students include the ability to prepare rationally cogent papers and the ability to understand political theories, historical movements, and the connections between each.

Departmental programs not only prepare students for occupations in government, business, education, and industry, but also are central to the University's traditional function of transmitting culture from generation to generation.

## HISTORY PROGRAM

The major in history leads to the degree of Bachelor of Arts (BA) or Bachelor of Science (BS) and prepares students for careers in teaching, law, government, and private enterprise, as well as entry into graduate programs.

## Program Goals

- To provide students with a general knowledge of history and historical methodology;
- To prepare students, through training in communication skills and in research methods, to gain knowledge of a given area of history;
- To prepare students to continue personal study and learning about specific subject areas in the discipline on an independent basis;
- To prepare students to engage in critical thinking; and
- To introduce students to the theoretical frameworks that serve as the foundation of historical scholarship.


## Expected Student Outcomes for the History Program

On completion of the Bachelor's degree, history majors at CSU-Pueblo will:

- Demonstrate literacy-analytical reading and effective writing skills-in general, and for historical content;
- Demonstrate understanding of the history of historical writing, and demonstrate the ability to apply the principles and theories that support historical writing;
- Demonstrate knowledge of specific times and locations studied, and knowledge of the complexities of the past and the diversity of human cultures in those times and places;
- Apply the concepts of historical thinking, for example, in evaluating change over time; and
- Demonstrate skills in historical research, including historical analysis and interpretation.


## General Requirements

- No grade below C is acceptable in the major or minor.
- Students are expected to complete HIST 300 before or in their third year of classes, and HIST 493 in their final year. Class size in HIST 300 and HIST 493 is limited. A grade of D+ or lower in HIST 300 or 493 will, after the third attempt in either course, result in being prevented from enrolling in the course again. The student may be eligible for reconsideration on a one-time basis, with approval by the student's advisor. If repeated registration, after the third attempt is permitted, subsequent failure to achieve a grade of C will make the student ineligible for readmission to those courses.
- Students must take HIST 300 and HIST 493 in residence. No courses will be accepted in transfer to substitute for either of these courses.


## Core Requirements for the History Major

| HIST | ourses | Titles | Credits |
| :---: | :---: | :---: | :---: |
| HIST | 101 | World Civilization to 1100 | . 3 |
| HIST | 102 | World Civilization 1100 to 1800 | ..... 3 |
| HIST | 103 | World Civilization since 1800. | . 3 |
| HIST | 201 | United States History I....... |  |
| HIST | 202 | United States History II. |  |
| HIST | 300 | Historiography |  |
| HIST | 493 | Seminar. |  |

## Requirements for the Bachelor of Arts Degree in History

Students must complete the -CoreRequirements for the History Major" as outlined above, plus 15 hours of history electives of which at least 6 hours must be from non US history courses. A minimum of two semesters of college level foreign language is required for the BA degree in History; more is recommended. The BA degree in History is appropriate for students planning to attend graduate or law school.

## Requirements for the Bachelor of Science Degree in History: General Emphasis

Students must complete the -CoreRequirement for the History Major" outlined above, plus 21 hours of history electives of which at least 6 hours must be from non US history courses (at least fifteen hours to be upper level). This emphasis is designed for those students who intend to enter business or government directly after graduation.

## Requirements for the Bachelor of Science Degree in History: Secondary Education Emphasis

The Secondary Education emphasis for the History Major leads to the degree of Bachelor of Science (BS) and prepares students for teaching at the middle and high school level. Students must complete the -Core Requirements for the History Major" listed above, 15 hours of history electives of which at least 6 hours must be from non US history courses, the -Scial Science Courses Required for Certification listed below, and all requirements of the Teacher Education Program.

## Other Social Science Courses Required for Certification



## Specific Requirements for the History Minor

HIST Courses Titles Credits
Nine hours selected from the following courses: ..... 9
HIST 101 World Civilization ..... 3
HIST 102 World Civilization to 1100 .....  3
HIST 103 World Civilization since 1800 ..... 3
HIST 201 United States History I ..... 3
HIST 202 United States History II. ..... 3
PLUS
HIST 300 Historiography ..... 3
History Electives approved by the minor advisor. ..... 9
TOTAL ..... 21
Outcomes Assessment Activities for the History Program

Portfolio reviews serve as the core, formal assessment tool for the History Program. Student portfolios contain papers written for two core courses required by the program-historiography and seminar. Portfolio papers are reviewed on the basis of the student learning outcomes.

## PRE-LAW

Although a political science or history major, or minor, is not required to attend law school, students completing either major will acquire the needed critical thinking and writing skills to enhance their chances of getting accepted to law school and once accepted, excelling at law courses.

## POLITICAL SCIENCE PROGRAM

The major in political science leads to the degrees of Bachelor of Arts (BA) and Bachelor of Science (BS), and prepares undergraduates for careers in law, government and politics. Courses in political science also serve to complement the liberal arts core at CSU-Pueblo and to prepare students for acceptance into graduate programs leading to professional degrees in law, public administration, or to specialized academic degrees.

## Program Goals

## To prepare students majoring in the discipline to:

- Demonstrate a basic understanding of historical, philosophical and empirical foundations of political science;
- Demonstrate a general command of knowledge about the American political system, global studies, the history of political thought, and standard political science research approaches; and
- Demonstrate an ability to continue personal study and learning on an independent basis about specific subjects in the discipline.


## To prepare students minoring in the discipline to:

- Demonstrate a basic understanding of the nature of the discipline, and
- Demonstrate a general knowledge and understanding of the American political system and of global studies.


## Expected Student Outcomes for the Political Science Program

Knowledge Outcome: Students should have factual knowledge about the various subfields in political science. This includes knowledge about the major theories, issues and methods of inquiry for each subfield.

Writing Outcome: Students should be able to write complex prose, with correct grammar. They should be able to present a coherent and persuasive argument on a political science topic in a research format following the APSA format.

## Critical Thinking Outcome: Students should be able to:

- Define problems, examine evidence, and analyze the assumptions leading to a conclusion;
- Question arguments, casual theories, evidence broad generalizations, and simple correlation;
- Are open to both sides of an argument; and
- Are prepared to examine and expose holes in all arguments (including their own).

Communication Outcome: Students should be able to clearly and concisely present their ideas as participants in classroom discussions and in presenting their research.

## General Requirements

- Students in the major must complete a minimum of 36 semester credit hours in political science, including 18 hours in the political science core. Students are required to earn a grade of $C$ or better in all political science courses.
- $\quad$ Students in the minor must complete a minimum of 21 semester credit hours in political science, including 9 semester credit hours in the political science core. Students are required to earn a grade of $C$ or better in all political science courses.
- A maximum of six credit hours of POLSC 480, Practicum in Politics and Public Service, may be applied towards the 36 hours required for the major, or three credit hours towards the 21 hours required for the minor.
- Depending on individual interests and goals, students are encouraged to take one year of foreign language, courses in statistics, and PHIL 204, Critical Thinking.


## Required Core Requirements for the Political Science Major

## POLSC Courses Titles Credits

POLSC 101 American National Politics .................. 3
POLSC 201 International Relations ........................ 3
POLSC 202 Comparative Politics ........................... 3
POLSC 250 Research Methods in Political
Science............................................... 3
POLSC 370 Western Political Thought................... 3
POLSC 493 Seminar .............................................. 3

TOTAL 18
Political Science Electives................................................ 18
Total hours required for the major .............................. 36

## Emphasis in Secondary Education

The Secondary Education emphasis prepares students for teaching at the middle and high school level. Students must complete the -Cఱ Requirements for the Political Science Major" listed above, 12 hours of political science electives, the - ©cial Science Courses required for Certification" listed below, and all requirements of the Teacher Education Program.

## Social Science Courses Required for Certification

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| ECON | 201 | Principles of Macroeconomics ............. 3 |
| GEOG | 101 | Physical Geography.......................... 3 |
| GEOG | 103 | World Regional Geography ................ 3 |
| HIST | 101 | World Civilization to 1100 ................... 3 |
| HIST | 102 | World Civilization from 1100-1800 OR |
| HIST | 103 | World Civilization Since 1800 .............. 3 |
| HIST | 201 | U.S. History I ................................... 3 |
| HIST | 202 | U.S. History II ................................... 3 |

## Specific Requirements for the Political Science Minor

POLSC Courses Titles Credits
POLSC 101 American National Politics ..................... 3
POLSC 201 International Relations ........................... 3
OR
POLSC 202 Comparative Politics
POLSC 250 Research Methods in Political
Science3
Political Science Electives ..... 12

## Outcomes Assessment Activities for the Political Science Program

The faculty of the Political Science program use a variety of methods for evaluating the student learning outcomes. These include an assessment of each student learning outcome in the political science senior seminar, a completed student exit survey in the senior seminar and an alumni survey that is conducted every five years.

## CENTER FOR THE STUDY OF HOMELAND SECURITY

The Political Science Program administers the Center for the Study of Homeland Security, which now offers a certificate in Homeland Security Studies and a Minor in Homeland Security for degree-seeking students.

## Student Learning Outcomes for the Homeland Security Program

Knowledge: Students will be able to demonstrate knowledge of intelligence and counter-intelligence concepts; legal and constitutional principles pertaining to homeland and national security policy; strategic planning interfaces between national, state, and local governments; conceptual aspects of terrorism and counter-terrorism; and
understand basic inter-agency communication needs, methods, and processes.

Writing: Students will be able to construct and present coherent, objective, and well reasoned arguments or discussions pertaining to topics on homeland security.

Critical Thinking: Students will be able to: recognize issues that are pertinent to homeland security; question issue validity; develop logically sound arguments pertaining to said issues; and evaluate sources of evidence pertaining to the issue (including contrary and supporting evidence).

Communication: Students will be able to construct, compose, and deliver professional reports, research, and briefings.

## CERTIFICATE IN HOMELAND SECURITY STUDIES

This certificate is for degree-seeking students as well as military, law enforcement, and emergency response personnel. The program core courses match curriculum guidelines established by the Department of Homeland Security. Recipients of the certificate will gain a deeper understanding of current security issues and the governmental decision-making process and the certificate will be valuable in hiring and promotion decisions in numerous career fields.

Non-degree-seeking students should apply as a Guest upon entering the program. The University does not transcript certificates, so records of the Homeland Security Studies Program and the issuance of the certificate are administered by the Political Science Program.

## Required POLSC Courses

## POLSC Courses Titles Credits

POLSC 270 Introduction to Homeland Security........ 3
POLSC 271 Terrorism............................................... 3
POLSC 272 Critical Incident Management ............... 3

## TOTAL 9

Only one course taken for the Homeland Security Certificate can count toward the political science major or minor.

For information regarding the Certificate in Homeland Security Studies, please call (719) 549-2156.

## MINOR IN HOMELAND SECURITY

The minor in Homeland Security provides students with an opportunity for in-depth study of the political and public
policy issues involved in the homeland security field of governance and industry. The minor consists of 18 credit hours. All students pursuing the minor would thus earn the non-transcripted Certificate in Homeland Security Studies also.

## Required Courses for Minor in Homeland Security

## POLSC Courses Titles Credits

POLSC 270 Introduction to Homeland Security........ 3
POLSC 271 Terrorism .............................................. 3
POLSC 272 Critical Incident Management ............... 3
POLSC 373 Intelligence and National Security......... 3
POLSC 374 Homeland Security and the Law ........... 3
POLSC 375 Threat and Strategic Planning ............... 3
TOTAL 18

Students have the option to replace one current 300 level Homeland Security class with an elective 300 level course for the minor. Any elective chosen must be approved prior to the student's enrollment in the course. Approval is given though student consultation with the Director of the Center for Homeland Security.

## Outcomes Assessment Activities for the Homeland Security Program

The Director of the Homeland Security program will assess, in conjunction with Homeland Security faculty, student learning outcomes for each course offered through the program once per year. Exit surveys of students having completed the minor will supplement the coursebased outcome assessment.

## PHILOSOPHY PROGRAM

In addition to exploring the methods, ideas, problems and history of philosophy, the minor in philosophy trains students to think with rigor, clarity and precision. Since these qualities are valuable in virtually any discipline, the minor supports a wide range of majors or career tracks. Philosophy and its sub-discipline of ethics pair particularly well with history, politics, law, literature, the arts, the sciences, business, healthcare, and technology.

## Program Goals

- To provide individual courses as well as an academic minor in philosophy;
- To sharpen students' critical thinking skills and to develop the abilities to speak and write in a clear, analytical manner;
- To develop students' understanding and philosophical methods and ideas, including their historical-cultural origins and contemporary applications; and
- To cultivate the habit of reflection that will allow students to apply their critical and philosophical skills in their personal and professional lives.


## Expected Student Outcomes

- Students will be able to recognize, analyze, and logically evaluate arguments encountered in sources ranging from philosophical and academic texts to the popular media.
- Students will be able to construct and present clear, well-reasoned defenses of theses both verbally and in writing.
- Students will be able to recognize and assess the relevance of philosophical ideas and methods in the historical interplay of philosophy and culture.
- Students will be able to apply philosophical methods to conduct ethical, metaphysical, and epistemological analyses.


## General Requirements

Students who wish to minor in philosophy must complete a minimum of 18 credit hours of approved philosophy courses with grades of $C$ or better.

## Specific Requirements for the Philosophy Minor

## PHIL Courses Titles Credits

PHIL 102 Philosophical Literature ......................... 3
PHIL 201 Classics in Ethics.................................. 3
PHIL 204 Critical Reasoning OR
PHIL 205 Deductive Logic..................................... 3
PHIL 280 The Ancients: Person, Polis, Cosmos .. 3
PHIL 380 The Moderns: Science, Self, State ....... 3
PHIL 480 Continental Thought ............................. 3
OR
PHIL 485 American Pragmatism and its Legacy .. 3
TOTAL 18

## Outcomes Assessment Activities

The coordinator of the Philosophy Program maintains a portfolio for each student with a declared minor in philosophy. Portfolios include a student's major papers written for the History of Philosophy courses, transcripts, and other pertinent information. Student portfolios, in conjunction with indirect measures such as the results from the annual survey of minors, form the basis for evaluating expected outcomes.

## GEOGRAPHY

The department extends classes in Geography primarily for students who wish to gain Colorado teacher licensure. There is no major or minor in Geography, but students majoring in a variety of areas would benefit from the Geography classes; e.g., History and Political Science.

# MASS COMMUNICATIONS DEPARTMENT AND CENTER FOR NEW MEDIA 

Department Chair: Samuel Ebersole

Faculty: Bregar, Ebersole, Joyce, Lovato, Steffen KTSC-FM Manager: Mike Atencio

The Mass Communications Department and Center for New Media supports the mission of the University by offering an applied major that integrates technological innovation with a traditional humanities and social sciences curriculum. Students are prepared for careers in the media and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

The 42 credit major in Mass Communications leads to the degrees of Bachelor of Arts (BA) and Bachelor of Science (BS). A degree in Mass Communications leads to careers in print and online journalism reporting and editing for news, features and sports; advertising copywriting, design and sales; digital video and audio production for radio, television, and the Internet; interactive multi-media application for the Internet; and strategic public relations for government, nonprofits, and business.

An 18 credit core is the foundation of the major with emphasis areas that require 15 additional credit hours and applied coursework that requires 9 additional credit hours.

The TODAY online news website and magazine are published as laboratory tools of the Mass Communications Department to serve the students, faculty and staff of CSU-Pueblo in addition to the Pueblo community. Editorial and management positions are awarded each semester after review of all applications from qualified students. The newspaper is funded through advertising revenue. The newspaper's advisor is a member of the Mass Communications faculty. Prerequisites: MCCNM 201 and declared major or minor in Mass Communications.

KTSC-FM is licensed to CSU-Pueblo as an educational radio station by the Federal Communications Commission. Operated by the Mass Communications department, the 8,000 -watt station serves the surrounding region.

Advanced Mass Communications students are involved in daily programming, production, and news. Prerequisites: MCCNM 101 and 140 and declared major or minor in Mass Communications.

KTSC-TV, a full-power station affiliated with Rocky Mountain Public Broadcasting and CPB, provides laboratory training and on-campus opportunities for television students in the KTSC Studio. Prerequisites: MCCNM 101 and 245 and declared major or minor in Mass Communications.

The Center for New Media is a cooperative effort between CSU-Pueblo and Pueblo Community College. As such, the Center provides additional resources and experiences for students, including opportunities to work in field production with a digital, six-camera production truck.

## Department Mission

The mission of the Mass Communications Department and Center for New Media is to offer a pragmatic and professionally oriented program designed to prepare majors for successful careers in the media and related areas and to prepare students for graduate study.

## Department Goals

1. Offer a marketable and professionally credible program.

- Provide a comprehensive foundation of mediaoriented theory and practice.
- Emphasize writing as strategic and professional communication.
- Emphasize personal ethics and professional ethics codes.
- Ensure curriculum meets standards of the professions represented.

2. Provide a student-centered experience for learning and advising.

- Create a proactive student-faculty advising experience.
- Create a collaborative department culture.
- Recognize student accomplishments and outstanding performance.

3. Create an applied learning environment with cuttingedge technology.

- Provide media laboratory opportunities for all majors.
- Offer a full range of internships at the junior and senior level.
- Provide technology for pedagogical and professional purposes.
- Create course content that is interactive, applied, and project-oriented.

4. Maintain a reputation for excellence.

- Maintain alumni relationships through an online database, annual alumni magazine, guest speakers, and professional networking.
- Conduct graduating senior surveys every semester and alum surveys every five years.
- Serve as mentors and role models for current students and alumni.


## Student Learning Outcomes

(Based on Department Goal 1: Offer a marketable and professionally credible program.)

1. Students will display critical thinking skills, conveying complex ideas related to current issues and ethical expectations of mass media and related disciplines.
2. Students will write with clarity and organization utilizing the proper format, writing mechanics and audience focus, in a manner that is professionally competitive for an entry-level position in the discipline.
3. Students will demonstrate technological expertise related to the specific emphasis area that is professionally competitive for an entry-level position in their discipline.
4. Students will demonstrate command of subject, organization of thoughts, and skill at interpersonal communication in front of an audience.

## Outcomes Assessment Activities

Student success is measured through a variety of methods that include classroom writing samples, portfolios of student work, professional internship evaluations, exit interviews, student employment upon graduation, and alumni feedback.

Each graduating senior creates an academic portfolio of all salient work or projects completed while in the department. Department faculty review and evaluate a selection of portfolios to assess student learning.

The Mass Communications Department and Center for New Media requires that the academic portfolio demonstrate a pattern of sustained academic growth and development of the major and minor, appropriate to the student's emphasis area.

The academic portfolio should reflect the quality and level of intellectual and scholarly work undertaken by the student while in the department, relative to the qualitative, quantitative, ethical, legal and aesthetic dimensions of the field. The appropriateness of the content is dictated by the student's emphasis area and is prescribed by the individual's advisor.

## General Requirements

- Majors are required to complete a 42-credit curriculum which includes:
- 18 credit Core
- 15-credit Emphasis area
- 9 credits of Applied coursework
- Successful Mass Communications majors will demonstrate sufficient knowledge, comprehension and analytical skills by the ability to evaluate specific communication events in the proper context of their emphasis area.
- Students majoring in Mass Communications must achieve a $C$ grade or better in all MCCNM courses, both required and elective, to be eligible for graduation. Students who earn below a C in MCCNM courses will be required to repeat them to achieve the 2.0 requirement for graduation in the major.
- Each faculty member will keep, in the department's central file, a set of course outlines or syllabi that list the objectives and skills achieved during the term. This central pool of materials describes the detailed expectations and accountability elements for the MCCNM major on a course-by-course basis.
- Consistent with general CSU-Pueblo policy, no student enrolled in MCCNM courses may accumulate unexcused absences, or arrive late for scheduled classes without faculty consultation.
- The Mass Communications department believes that grades are valid quantitative indicators of student performance. Students' GPAs in the major or minor will be used by emphasis area advisers for both formative and summary evaluations of majors and minors.
- While it is necessary for Mass Communications and Center for New Media majors and minors to meet the minimum GPA standards set by the department and the University, it is expected that graduates will exceed these standards.
- MCCNM 101, Media and Society, cannot be counted towards social science and general education by Mass Communications majors.


## THE MASS COMMUNICATIONS AND CENTER FOR NEW MEDIA MAJOR

## Specific Requirements for the Major Core

## MCCNM Courses Titles Credits

MCCNM 101 Media and Society ............................ 3
MCCNM 201 Introduction to Journalism .................. 3
MCCNM 210 Intro to Integrated Communication.... 3
MCCNM 220 Introduction to Electronic Media ........ 3
MCCNM 411 Media Law and Ethics....................... 3
MCCNM 493 Seminar............................................... 3

## CHOOSE ONE OF THREE EMPHASIS AREAS <br> Specific Requirements for the Emphasis in Electronic Media

Advisors: Sam Lovato, and Justin Bregar

| MCCNM Courses | Titles | Credits |
| :--- | :--- | :--- | :--- |
| MCCNM | 318 | Regulation of Electronic Media......... 3 |
| MCCNM | 320 | Media Programming.................... 3 |
| MCCNM | 336 | Interactive Media............................... 3 |
| MCCNM | 338 | Global Communication.................. 3 |
| MCCNM | 425 | Audience Research Methodology .... 3 |

TOTAL 15

Specific Requirements for the Emphasis in Integrated Communication

Advisor: Samuel Ebersole

| MCCNM Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| MCCNM | 302 | Advertising Writing......................... 3 |
| MCCNM | 321 | Public Relations Case Problems ....... 3 |
| MCCNM | 422 | Writing for Public Relations .............. 3 |
| MCCNM | 425 | Audience Research Methodology .... 3 |
| MCCNM | 430 | Integrated Communications <br> Campaigns ....................................... 3 |

TOTAL 15
Specific Requirements for the Emphasis in Journalism

Advisors: Richard Joyce and Leticia Steffen

| MCCNM | Courses | Titles | Credits |
| :---: | :---: | :---: | :---: |
| MCCNM | 304 | Feature Writing. | ....... 3 |
| MCCNM | 305 | News Reporting.. | 3 |
| MCCNM | 311 | Copy Editing. | . 3 |
| MCCNM | 312 | Publication Design | . 3 |
| MCCNM | 445 | Reporting Public Affairs.. | ........ 3 |

## MCCNM Applied Electives: 9 credits required

| MCCNM Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| MCCNM | 211 | Digital Publishing................................. 3 |
| MCCNM | 232 | Website Design.......................... 3 |
| MCCNM | 233 | Script Writing............................. 3 |
| MCCNM | 238 | Multimedia Applications ..................... 3 |
| MCCNM | 245 | Digital Media Production ................ 3 |
| MCCNM | 246 | Advanced Digital Media Production .. 3 |
| MCCNM | 260 | Digital Imaging ............................. 4 |
| MCCNM | 282 | Digital Media Post Production ......... 3 |
| MCCNM | 332 | Advanced Web Design and <br> Development..................................... 3 |

MCCNM 350 Advanced Media Lab .....................2-3
MCCNM 494 Field Experience ........................Varies
Note: Prerequisites may exist with some courses and Media Lab is required of all majors.

## Co-curricular Requirements

The thrust of the Mass Communications Department and Center for New Media is pragmatic, therefore, all majors must enroll in a minimum of one 2 or 3 credit lab. Faculty have discretion in curriculum, programming and enrollment of all media labs.

- TODAY online newspaper and print magazine (print and online editorial, photography, audio/video, advertising)
- KTSC-FM on-campus radio station (studio and field production, programming, promotion, talent)
- KTSC-TV/RMPBS on-campus television station (studio production)
- CNM Productions (field production)

Students may earn a maximum of 9 credits in media labs.
Students desiring internships must have a 3.0 grade point average in their Mass Communications courses. Internships are not required, are most often reserved for majors, and are at the discretion of the faculty advisor. Students may earn a maximum of 9 hours of internship credit.

## Specific Requirements for the Mass Communications and Center for New Media Minor

Students desiring a minor in Mass Communications must complete 21-credit hours approved by their minor area advisor and MUST include MCCNM 101. The minor may not include more than 3 credits of media lab and must include at least 6 hours of upper division Mass Communications coursework. Students must earn a C or better in all Mass Communications courses.

## MILITARY SCIENCE (US ARMY)

## (Reserve Officers' Training Corps Program)

Professor of Military Science: Lieutenant Colonel Mark W. Thompson; Assistant Professor of Military Science: Cpt. Eric Hayes, Senior Military Science Instructor: Mr. Gener Molina

## The Army ROTC Program

The focus of this program is to enroll, develop, and commission college-educated men and women to serve in the United States Army. Participants in the program are
commissioned as a Second Lieutenant in the Army upon graduation with a bachelor's degree. They will be expected to serve in either the active Army or in the Reserve Components (Army Reserves or Army National Guard) after commissioning.

The program is centered on teaching the principles of leadership. These principles can be applied to positions in the military or in civilian careers. All courses of instruction are designed to develop leadership and management skills as well as enhance the self-confidence and initiative of each student.

Military Science is taken in addition to the required courses for each student's major.

ROTC is a four-year program that is divided into two phases: the Basic Course and the Advanced Course.

A minor in Military Science is available for qualified students.

## The Basic Course

The focus for these lower division courses (MSL 100/200 courses) is to lay a foundation for more advanced instruction in the skills needed to be a successful leader. Students may participate even if they do not plan on receiving a commission in order to gain experience in leadership and management.

This phase is open to all qualified students (generally freshmen and sophomores). Students should be aware that there are some physical requirements for successful course completion.

There is no military obligation for participation in the Basic Course unless a student is receiving an Army ROTC Scholarship.

Sophomores wanting to complete the Basic Course requirements so that they may enter the Advanced Course can compress the Basic Course and/or attend the Leader's Training Course during the summer between their sophomore and junior years. For further information please see below and contact the Department of Military Science.

## The Advanced Course

The Advanced Course (MSL 300/400 level courses) is oriented to preparing students (juniors and seniors) who have successfully completed the basic course requirements with the skills and knowledge necessary to be commissioned as a Second Lieutenant in the Army. The focus of the Advanced Course continues on building leadership skills and abilities.

Students participating in the Advanced Course have a contractual obligation to complete the program and enter the Army upon graduation.

Students must have a minimum of four semesters remaining in their course work before graduation to participate in the Advanced Course and they must be in a full-time status ( 12 credit hours per semester) during each of those semesters.

Credit for the Basic Course for entry into the Advanced Course may be achieved in a number of ways. The normal progression is to successfully complete all four Basic Course Military Science classes (MSL 101, 102, 201 and 202) with a grade of "C" or better. Students can also enter the course laterally by receiving credit for one of the following:

- Prior enlisted service in the Army, Air Force, Navy or Marines.
- Participation of a minimum of three years in a JROTC program.
- At least one year as a service academy cadet.
- Successful completion of the Army ROTC Leaders Training Course (LTC). This training is available to students who did not have the opportunity to participate in any of the above programs. The fiveweek camp is conducted every summer at Fort Knox, KY. Participants receive pay while attending. The Army pays travel and some other expenses. For more information contact the Department of Military Science.

Students participating in the Advance Course will be required to attend the Leadership Development and Assessment Course (Advanced Camp) which is conducted annually at Fort Lewis, Washington. This course is normally attended during the summer between a student's junior and senior year. It is a 32-day event that provides the best professional training and evaluation for all students participating in ROTC before commissioning. The course mission includes continued military training and leadership development, but the primary focus is to evaluate each student's officer potential. This course represents the only opportunity in ROTC to gather all qualified students from across the nation on one tevel playing field" for the purpose of making those assessments. Successful completion of the course is mandatory for commissioning.

## Course Offerings

## Basic Course

## Courses Titles <br> Credits

MSL 101
MSL 102
MSL 201
Leadership \& Personal Development (F)....... 1 Introduction to Tactical Leadership (S).......... 1 Innovative Team Leadership (F)..................... 2
MSL 202 Foundations of Tactical Leadership (S)......... 2 2

## Advanced Course

Courses Titles Credits

MSL 301 Adaptive Tactical Leadership (F)................... 3
MSL 302 Leadership in Changing Environments (S) .... 3
MSL 303 Advanced Camp (SS).................................... 6
MSL 401 Developing Adaptive Leaders (F) ................... 3
MSL 402 Leadership in a Complex World (S)................ 3
MSL 485 Special Studies in Leadership (F,S) .............. 1

## The Military Science Minor

A minor in Military Science is available for students participating in the Army ROTC Program. Participants must achieve a minimum of 21 credit hours by graduation, which includes credit for all Advanced Course classes (to include graduation from Advanced Camp) and the Professional Military Education (PME) requirement. More information about the minor is available through the Department of Military Science.

## Professional Military Education (PME) Requirements

To receive a commission as a Second Lieutenant in the U.S. Army and to graduate with a Minor in Military Science students must also complete a course in the following area to receive credit for their Professional Military Education (PME) requirements. Further information on this requirement will be provided to the students during contracting into the Army ROTC program.

- Military History


## Additional Requirements

- Remain a full-time student (12 credit hours or greater) in good academic standing.
- Initiate a security clearance investigation within 60 days from signing a ROTC contract to meet precommissioning requirements.
- Must pass the Combat Water Survival Test.


## Scholarship Information

The Army ROTC Scholarship Program provides financial assistance for the education and training of highly motivated men and women who desire to pursue careers as commissioned officers in the U.S. Army after graduation with a bachelor's degree. Four, three- and twoyear scholarships are available to qualified candidates. The scholarship pays for school tuition, books, certain fees, and provides the student with a monthly, tax-free stipend of between $\$ 300$ and $\$ 500$ per month for up to 10 months per year (depending on academic status). For more information pertaining to scholarships and enrollment eligibility please contact the Department of Military Science at $549-2163 / 2176 / 2141$. Their office is located in AM Building, Room 113.

## Military Science and Leadership Student Learning Outcomes

- Students will demonstrate proficiency in small unit leadership by applying the seventeen leadership dimensions (developed by Cadet Command).
- Meet or exceed the standard of the Army Physical Fitness Test (APFT) and make a commitment to optimal health and physical well being as a way of life. Students must also meet and adhere to the Army height/weight standards and authorized body fat percentages.
- Demonstrate the ability to lead alongside with the seven Army values of loyalty, duty, respect, selflessservice, honor, integrity, and personal courage.
- Demonstrate the understanding of customs and courtesies of the U.S. Army and Army's role in supporting the orders of superiors culminating with the Commander in Chief of the U.S. Army.
- All students will demonstrate various understanding of leadership and management skills in correlation to their academic y ear progression.
- In their junior year students will attend the Leadership Assessment and Development Course (LDAC) to be tested, assessed, and compared to all Army ROTC cadets in the nation.


## Outcomes Assessment Activities

Student success is measured through a variety of methods that include classroom work, Army Physical Fitness Test (APFT), Army Height and Weight Standards, Leadership Evaluations, complete and pass Leadership Development and Assessment Course (LDAC).

- Students must pass or exceed the (APFT) each semester, as they progress higher in the MSL courses they must pass the (APFT) consistently and should progressively achieve a higher score.
- Parallel with (APFT) students must pass the Army Height and Weight standards.
- In their junior (MSL 301/302) year students are placed in leadership positions where they are evaluated in their leadership skills to include the seventeen leadership dimensions and the seven Army values.
- After completion of MSL 302 (spring semester) students must attend and complete the Leadership Development and Assessment Course (LDAC). It is a 32 day fully immersed assessment process that covers everything that was learned and evaluated since the cadet's freshman year. Students are subjected to high stress scenarios and placed in critical leadership roles that will fully display an individual's ability to lead and serve as an officer in the United States Army.


## MUSIC DEPARTMENT

Department Chair: David Volk

Faculty: Barto, Beck, Brandt, Chi, Creager, De Luca, Eastin, Eberhardt, Eickelman, Hudson, lhm, Markowski, Metchkov, Mills, Turner

The Music Department of Colorado State UniversityPueblo seeks to promote excellence in musicianship and to equip students for a career in music. The major in music leads to a degree of Bachelor of Arts (BA).

## Mission, Goals and Objectives

The mission of the Department of Music at Colorado State University-Pueblo is to prepare undergraduate students to function professionally in their chosen field of music within the larger context of a liberal education, to provide artistic enrichment for the community, and to serve as an artistic resource.

The goals of the Department of Music are:

- To prepare students to function professionally in their field of music,
- To provide appropriate musical experiences for students in the liberal arts program,
- To prepare students to pursue advanced study in their respective areas,
- To encourage in all students the development of musical sensitivity and an understanding of the aesthetic process, and
- To provide for the University and community the enrichment afforded by a variety of musical experiences.

The objectives of the Department of Music used to accomplish the goals outlined above include:

- To offer courses and related experiences of an appropriate nature and quality and of sufficient breadth to allow the student adequate opportunity to acquire the necessary knowledge and skills;
- To offer and encourage student participation in a variety of ensembles and other instructional opportunities, allowing for varying musical tastes, experiences, and abilities;
- To challenge each music student to progress beyond the minimum requirements of a degree program, and to provide opportunities for growth beyond classroom instruction;
- To present music in a manner that promotes it as an art form; and
- To offer and promote quality performance and instruction, and to serve as an artistic resource.


## Expected Student Outcomes

Upon completion of the Bachelor of Arts degree in Music, students will

- Read, analyze, and perform music with fluency in at least one performance medium and in a variety of performance styles;
- Use the piano proficiently as an instrument for independent study of music theory, analysis of scores, and preparation of compositions or arrangements, as appropriate to the common tasks of a professional musician;
- Demonstrate proficiency in aural recognition and analysis of music, and in singing musical lines at sight, as appropriate to the common tasks of a professional musician;
- Recognize and describe representative selections of music from all the significant style periods and genres of western art music; and
- Create arrangements and original compositions utilizing the recognized ranges and idioms of orchestral and band instruments and of vocal ensembles.

In addition, students in the Performance Emphasis program will:

- Conduct large and small ensembles in their primary performance medium;
- Prepare and present in public a wide selection of repertoire representative of the highest standard of performance technique and style appropriate to young professional artists; and
- In conjunction with recital performances, prepare scholarly program notes on the repertoire being presented and work closely with administrative staff to complete the copy and format of professional publicity documents.

In addition, students in the Music Education Emphasis program will:

- Conduct large and small ensembles in their primary performance medium;
- Demonstrate through field experiences and student teaching the necessary skills and dispositions for teaching music in a variety of public school settings;
- Articulate in written documents addressed to the general audience (such as parents, school board members, or community at large) a well-grounded philosophy of music education; and
- Create instructional plans, long-range curriculum outlines, and assessments for music education at elementary and secondary levels, following Colorado Academic Standards and incorporating recognized best practices in music pedagogy.


## Outcomes Assessment Activities

Department faculty hear all music majors perform prepared solos at least three times per semester, with both formative and summative assessments recorded at significant points, such as final juries and the Junior Qualifying Exam at the end of the sophomore year. In addition, every primary and secondary ensemble performs at least one concert per semester. From the accumulated success of these performances, the faculty can determine and assess:

- Attainment of performing skills as students progress through the curriculum;
- Effectiveness of recruiting and retention in each instrumental area and vocal range; and
- Degree of knowledgeable application of the concepts of music theory and history to the sensitive performance of a wide range of repertoire.

Every music major must pass an oral exam over the first two years' work before being allowed to continue in the 300-level courses of the music degree. This Junior Qualifying Exam holds students accountable for long-term learning in the discipline, but it also reveals patterns of effective or ineffective instruction across the department for program assessment purposes. Every music major must also complete a satisfactory demonstration of piano proficiency before graduation.

Students graduating in the emphasis areas of Performance or Music Education are required to present senior level recitals and (for Music Education) to pass the national standardized PLACE test. A general capstone evaluation for all music majors is being planned; the target date for implementation is the 2012-2013 academic year.

## Requirements

## GPA

Students are required to complete all major and minor courses with a grade of $C$ or better and to maintain a cumulative GPA of 2.5 or better.

## Minor Area

The ability to think across disciplines contributes significantly to the educational experience. Music majors are expected to complete an approved minor, in keeping with the requirement of the College of Humanities and Social Sciences, with a cumulative GPA of 2.5 or better.

## Performance Skills

The attainment of an appropriate level of performance skills is required in order to function successfully as a musician. The minimum Performance Standards, which
appear on the music department's web site and in the music department student handbook, provide representative examples of music literature and repertoire and must be successfully completed for each of the musical areas of performance concentration.

## Admission to Upper Division

All music majors must qualify for admission to Upper Division (junior-level) study leading to the specific degree by successfully completing the Junior Qualifying Exam at the end of their sophomore year. In addition, all music majors will be required to pass MUS 229 (Piano Proficiency Completion) before performing an upper level recital, student teaching, or graduating. See the Department of Music Student Handbook for specific information regarding these evaluations.

## Standards

Knowledge of specific subject areas, as recommended by the National Association of Schools of Music in music education, music theory, music history, music technology, and music performance will be measured through outcomes-testing.

## Degree in Music

The Bachelor of Arts in Music provides a broad base for a number of careers in music such as private studio teachers, and is intended as preparation for advanced graduate study.

The Bachelor of Arts in Music: Music Performance emphasis is appropriate for those students who plan to perform, teach privately, or pursue further study at the graduate level.

The Bachelor of Arts in Music: Music Education emphasis is a professional degree and provides the essential training, knowledge and skills necessary for a teaching career in choral, instrumental, or general music. The degree leads to K-12 music teacher licensure.

The University also offers a Minor in Music which allows the student to acquire further knowledge of music as an art while enjoying participation in music performance.

## Specific Requirements for the Bachelor of Arts in Music

General Education .......................................................... 35
NOTE: must also complete the Foreign Language Requirement.

NOTE: must include MUS 118, Music Appreciation. In addition, all students must participate in appropriate Primary and Secondary ensembles as assigned each semester, excepting when Student Teaching.

## Bachelor of Arts in Music Core Courses

$\left.\begin{array}{lll}\text { MUS Courses } & \text { Titles } & \text { Credits } \\ \text { MUS } & 150 & \text { Music Theory I...................................... } 2\end{array}\right]$

TOTAL 48 (Music Ed 44-45)

Note: Piano students complete either of the following in lieu of Functional Piano courses:

| MUS | 346 | Piano Literature OR |  |
| :---: | :---: | :---: | :---: |
| MUS | 347 | Piano Pedagogy. | ...... 2 |
|  |  |  | TOTAL 2 |
| Free Electives |  |  | ......35-37 |
| Degree Total ......................................................... 120 |  |  |  |

*Primary ensembles: (All courses MUS)

|  | $\underline{F r}$ | $\underline{\text { Soph }}$ | $\underline{\mathrm{Jr}}$ | $\underline{\text { Sr }}$ |
| :--- | ---: | :--- | ---: | ---: |
| Chamber Choir | 109 | 209 | 309 | 409 |
| Wind Ensemble | 112 | 212 | 312 | 412 |
| Guitar Ensemble, Classical | 132 | 232 | 332 | 432 |
| Guitar Ensemble, Jazz | 136 | 236 | 336 | 436 |
| Piano Ensemble | 142 | 242 | 342 | 442 |
| Orchestra | 144 | 244 | 344 | 444 |
|  |  |  |  |  |
| **Secondary Ensembles: (All courses MUS) |  |  |  |  |
|  |  |  |  |  |
|  | $\underline{\text { Fr }}$ | $\underline{\text { Soph }}$ | $\underline{\text { Jr }}$ | $\underline{\mathbf{S r}}$ |
| Concert Choir | 102 | 202 | 302 | 402 |
| Collaborative Music Ensemble | 104 | 204 | 304 | 404 |
| Vocal Jazz Ensemble | 108 | 208 | 308 | 408 |
| Brass Ensemble | 114 | 214 | 314 | 414 |
| Chamber Ensemble | 121 | 221 | 321 | 421 |
| Percussion Ensemble | 124 | 224 | 324 | 424 |
| Pep Band | 131 | 131 | 331 | 331 |
| Woodwind Ensemble | 134 | 234 | 334 | 434 |
| Marching Band | 135 | 230 | 330 | 430 |
| Jazz Ensemble | 154 | 254 | 354 | 454 |

NOTE: Ensembles are determined by the student's declared performance area. See advisor if further information is required.

## Specific Requirements for the Bachelor of Arts in Music: Music Performance Emphasis

Music Core ..... 48
General Education ..... 35
(NOTE: must also complete second semester level of a Foreign Language)
Music Performance Emphasis Requirements

| MUS Courses | Titles | Credits |
| :--- | :--- | :--- | :--- |
| MUS | 305 | Music History I <br> OR |
| MUS | 355 | Music History II (other than core).......... 3 |
| MUS | 350 | Theory V-Composition and Analysis.... 3 |
| MUS | x01 | Music Performance Symposium ......... 0 <br> (2 semesters) |
| MUS | $380-399$ | Junior Recital....................................... 2 |
| MUS | $470-489$ | Senior Recital ................................. 2 |
| MUS | xxx | Primary Ensemble ......................... 2 <br> (2 semesters, upper division) |
| MUS | 359 | Advanced Conducting ........................ 2 |

Note: Vocal students must also complete the
following: following:

| MUS 323 | Diction for Singers ................................ 2 |
| :--- | :--- | :--- |

## Specific Requirements for the Bachelor of Arts in Music: Music Education Emphasis

Music Core (Music Ed) 44-45

General Education35

- Humanities requirements must include MUS 118 (Music Appreciation) and SPCOM 103 (Speaking and Listening).
- Social Science requirements must include either PSYCH 151 (Human Development) or PSYCH 251 (Childhood and Adolescence).

NOTE: The Foreign Language requirement must also be satisfied. It is recommended to take FL 100 as a Humanities and then take ANTHR/ENG 106 as a Social Science to satisfy this requirement.

## Music Education Emphasis Requirements

| MUS Courses | Titles |  |
| :--- | :--- | :--- |
| MUS | 305 | Music History I <br> OR |
| MUS | 355 | Music History II (other than core) ........ 3 <br> MUS <br> Technology for Music Educators <br> (in lieu of MUS 303) ........................ 2 <br> Music Performance Symposium ........ 0 |
| MUS | x01 | (1 semester) |
| MUS | $470-489$ | Senior Recital .................................... 2 |
| MUS | 359 | Advanced Conducting...................... 2 |

MUS 340 General Music Methods ....................... 2
MUS 440 Choral Music Methods ........................ 2
MUS 441 Instrumental Music Methods............... 2
TOTAL 20

## Education Requirements



Degree Total 126-127

There are additional licensure requirements; consult the Teacher Education Program for details.

## Specific Requirements for the Music Minor

| MUS Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| MUS | 118 | Music Appreciation ............................. 3 |

TOTAL 20

## Master of Education/Music Emphasis

Beginning in Summer 2008, the Music Department began phasing in courses at the 500 -level to fulfill an 18 -credit emphasis area in the Master of Education degree. Most courses will be offered in concentrated summer sessions, to enable teachers to complete credits between school terms. Admission requirements include a bachelor's degree and teacher licensure; interested persons should read the full program description in the Master of Education section of this catalog, and contact the Music Department for specific questions.

## Core Knowledge Areas, 12 credits

| MUS Courses | Titles | Credits |
| :--- | :--- | ---: |
| MUS 545 | Current Issues in Music |  |
|  | Education...................................... 3 |  |


| MUS | 559 | Advanced Music Analysis .................... 3 |
| :--- | :---: | :--- |
| MUS 565 | Methods in Research in Music ED ...... 3 |  |

## TOTAL 12

## Advanced Skill Areas, 6 credits from the following:

| MUS Courses | Titles .............................................. 1 |  |
| :--- | :--- | :--- |
| MUS | 513 | Advanced Vocal Pedagogy....... |
| MUS | 523 | Advanced Percussion Pedagogy . 1 |
| MUS | 533 | Advanced String Pedagogy ......... 1 |
| MUS | 543 | Advanced Woodwind Pedagogy .. 1 |
| MUS | 553 | Advanced Brass Pedagogy........ 1 |
| MUS | $5 x^{*}$ | (see note below) ...................... 2 |

TOTAL 6
*Applicable 500-level applied lessons or ensemble courses, as listed in the Course Description section of this catalog.

## Additional Information

The Department of Music Student Handbook is intended as a supplement to the University Catalog and is binding in all matters relating to the Department of Music at Colorado State University-Pueblo. A copy of the handbook may be found on the University Department of Music website, and printed copies are located in the Music Office (A/M 175) and in all music faculty offices.

The Colorado State University-Pueblo Department of Music is an accredited member of the National Association of Schools of Music.

## NON-PROFIT ADMINISTRATION MINOR

Advisor: Jennifer Mullen, 549-2856

## Mission

The nonprofit administration minor is a multi-disciplinary program designed for students wanting to pursue careers in nonprofit organizations that include the arts, human services, recreation, chambers of commerce, civic efforts, and health care. The nonprofit administration minor supports the mission of the university by promoting civic responsibility and encouraging innovation.

Three student learning outcomes are directly related to the mission of the nonprofit administration minor: 1) identify basic components on nonprofit organizations; 2) develop a
strategic plan for a new nonprofit organization; 3) apply knowledge of nonprofit organizations within an internship setting.

A variety of suggested electives allows student to focus their coursework toward the type of nonprofit career they desire. MCCNM 370, Nonprofit Organizations and Communication, is the only required course in the minor. Other core courses allow for student choice, as do the electives. An internship in a nonprofit organization is also required and can be coordinated with the student's major area of study.

## Student Learning Outcomes

1. Students will be able to identify the basic components in any nonprofit organization.
2. Students will develop a strategic plan for a new nonprofit organization.
3. Students will apply knowledge on nonprofit organization in an internship setting.

## Outcomes Assessment Activities

Student learning is measured through the development and design of a strategic plan for a new nonprofit organization and through the completion of an internship with a nonprofit organization. Faculty teaching the minor area courses will evaluate each strategic plan developed by students, paying close attention to the student's ability to convey the necessary components of a nonprofit organization. Internship supervisors evaluate students based on their ability to apply what they've learned in their courses into an actual nonprofit setting. Students evaluate how well their courses prepared them for their nonprofit internships. The results of these assessment activities are used to improve program offerings and enhance student learning.

| Specific Requirements for the Non-Profit Administration Minor |  |
| :--- | :--- |
| Core Courses: | ................................................... 9 credits |

## Elective Courses:

$\qquad$ 12 credits

The following courses are suggested electives. Students are encouraged to identify courses that will assist in their specific nonprofit career goals. Students are required to earn 12 credits, but can choose additional electives. The required 12 credits can fall within the same content area or across disciplines; however, students may only use 6 credits from their major. No general education or other minor courses can be double-counted. Some courses may require prerequisites.

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| ART | 281 | Graphic Design I............................... 3 |
| BUSAD | 270 | Business Communication ................... 3 |
| ECON | 202 | Principles of Microeconomics ............. 3 |
| ENG | 303 | Advanced Composition...................... 3 |
| ENG | 305 | Technical \& Scientific Report Writing .... 3 |
| ENG | 326 | Writing for the Web........................... 3 |
| ENG | 440 | Magazine Writing ............................. 3 |
| FIN | 330 | Principles of Finance ......................... 3 |
| MCCNM | 210 | Intro to Integrated Communication....... 3 |
| MCCNM | 211 | Digital Publishing .............................. 3 |
| MCCNM | 321 | Public Relations Case Problems.......... 3 |
| MCCNM | 422 | Writing for Public Relations................. 3 |
| MCCNM | 430 | Integrated Communications |
|  |  | Campaigns ...................................... 3 |
| MGMT | 301 | Organizational Behavior .................... 3 |
| MGMT | 318 | Human Resource Management ........... 3 |
| MKTG | 340 | Principles of Marketing ...................... 3 |
| POLSC | 340 | Public Policy .................................... 3 |
| POLSC | 411 | Legislatures and Legislation ................ 3 |
| POLSC | 480 | Practicum in Politics and Public |
|  |  | Service............................................ 3 |
| SPN | 310 | Introduction to Hispanic Literature ....... 3 |
| SW | 350 | Social Welfare Policy ......................... 3 |
| SW | 324 | Social Work Intervention III................. 3 |

Internship: 3 credits

Students are required to earn a 3-credit internship in a nonprofit organization to be approved by the nonprofit advisor.

## PSYCHOLOGY DEPARTMENT

Department Chair: P. Levy<br>Faculty: Bridgmon, Brett-Green, Levy, Madrid, Pratarelli, Yescavage

Psychology is a field of inquiry which is called the science of behavior and answers questions about how and why organisms behave as they do. The field of psychology is enormous with many sub fields. Some areas pertain to animals, while others are focused on the behavior of humans. Still other areas focus on, abnormal behavior or
complex social and emotional behavior while the cognitive area focuses on how people perceive, learn, remember, and think.

Psychology is a discipline based on theoretical perspectives and information gained through research. Therefore, the psychology major is based on understanding theory as well as learning the methods of inquiry, evaluation, and drawing appropriate conclusions. These skills are useful for problem solving in many applied settings.

The bachelor's degree program in psychology at CSUPueblo offers a curriculum which provides the student with an overview of the major areas within psychology, along with the opportunity to select courses which fit their personal interests. Through psychology courses at CSUPueblo, a student can enhance their career opportunities and/or gain an academic grounding for professional and graduate training. Students who seek careers as professional psychologists should consider studies at the graduate level. Students are encouraged to take advantage of many opportunities in the psychology department including field placements and both laboratory and field-based research. There is a local chapter of Psi Chi, the National Honor Society in Psychology, which encourages students to maintain excellence in scholarship. Students are encouraged to participate in both Psi Chi and the Psychology Club.

## Expected Student Outcomes

- Identify the major concepts and historical trends in psychology and evaluate theoretical perspectives.
- Apply basic research methods and ethical values in psychology, including design, data analysis using SPSS, and interpretation of results.
- Communicate effectively verbally and in writing including APA style.
- Students will act ethically and responsibly-both individually and with others-demonstrating an awareness of and respect for diversity.
- Implement psychological knowledge, skills and values in occupational pursuits in a variety of settings that meet personal goals and societal needs.

These expected learning outcomes apply for both the BA and the BS degrees in psychology.

## Bachelor of Science Degree in Psychology

Students must complete all of the major degree requirements. In addition, students must complete 8 credits in the natural sciences or math (BIOL, CHEM, GEOL, MATH, or PHYS) beyond their general education courses. EXHP 162 and EXHP 162L cannot be used to satisfy the additional science requirement.

## Bachelor of Arts Degree in Psychology

Students must complete all of the major degree requirements. In addition, students must complete the foreign language requirements as stated in the Academic Policies section of the University catalog beyond their general education courses. This requirement includes completion of the second level of a foreign language, or completion of FL 100 and ANTHR/ENG 106, or completion of the first and second level of American Sign Language.

## Major Requirements

A total of 42 hours in psychology is required for the major. Psychology majors should consult a faculty advisor who will assist in selecting psychology courses to complete the major.

## Basic Core Requirements

| PSYCH Courses Titles | Credits |  |
| :--- | :--- | :--- | ---: |
| PSYCH | 100 | General Psychology............................. 3 |
| PSYCH | 103 | Introductory Psychology for Majors..... 2 |
| PSYCH | $207 /$ L | Quantitative Research Methods I/Lab.. 4 |
| PSYCH | $209 /$ L | Quantitative Research Methods II/Lab .. 4 |
| PSYCH | 401 | History \& Systems of Psychology ........ 3 |

Two of the following courses............................................. 6
PSYCH 311 Theories of Personality
PSYCH 352 Social Psychology
PSYCH 353 Advanced Developmental Psych
PSYCH 362 Abnormal Psychology
One of the following courses............................................. 3
PSYCH 336 Learning and Motivation
PSYCH 337 Memory and Cognition
One of the following courses with lab .4
PSYCH 331/L Physiological Psychology/Lab
PSYCH 334/L Perception/Lab
One of the following courses .3

PSYCH 314 Environmental \& Conservation Psych
PSYCH 315 Industrial/Organizational Psych
PSYCH 342 Educational Psychology
PSYCH 471 Clinical Psychology
TOTAL 32

## PSYCH ELECTIVES

A total of 10 credits of Psychology Electives are required for the major.

## PSYCH Courses Titles

## Credits

PSYCH 110 Improving Memory 2
PSYCH 151 Human Development......................... 3
PSYCH 205 Intro to Sport Psychology.................. 3

PSYCH 211 Women and Society ......................... 3
PSYCH 212 Sexism and Racism in America ........ 3
PSYCH 220 Drugs and Behavior........................... 3
PSYCH 222 Understanding Animal Behavior ....... 3
PSYCH 231 Marriage and Family Relationships .. 3
PSYCH 241 Human Sexuality .............................. 3
PSYCH 251 Childhood and Adolescence ............. 3
PSYCH 351 Psych of Exceptional Individual ........ 3
PSYCH 381 Principles of Psychological Testing I 3
PSYCH 410 Advanced Data Analysis................... 3
PSYCH 420 Human Evolutionary Psych............... 3
PSYCH 463 Psychopathology of Childhood ......... 3
PSYCH 464/L Systems of Counseling and Psychotherapy/Lab. .4

PSYCH 465 Behavior Modification .....  3
PSYCH 475 Group Process. .....  3
PSYCH 492 Research ..... 1-3
PSYCH 494 Field Experience ..... 1-12
PSYCH 495 Independent Study ..... 1-3
Basic Core Requirements ..... 32
Psychology Electives ..... 10

TOTAL 42
Psychology majors will be required to complete a minor to fulfill the CHASS requirements of 18 credits outside of the major beyond their major requirements and the general education requirements. Please note: PSYCH courses cannot be included in this total.

## Prerequisites

Students should be aware that there are prerequisites to some courses. For instance, it is important to note that 2 years of high-school algebra (or equivalent) is the prerequisite for PSYCH 207 \& 209. Successful completion of PSYCH 207 is the prerequisite for PSYCH 209. PSYCH 401 should not be taken until the senior year, preferably in the last semester before graduation.

## Note:

- A maximum of 6 credit hours of field experience and/or independent study may be applied towards the required 42 total hours in psychology.
- Students may take PSYCH 491 an unlimited number of times; however, only six credits may count toward the psychology major.


## General Education

General Education requirements are to be taken outside of the major. Therefore, students who major in psychology may not use psychology courses for general education.

## Upper Division Requirement

Psychology majors must take a minimum of 24 credits of upper-division coursework in psychology.

## GPA

A minimum grade of $C$ is required in all psychology courses counting toward the psychology major.

## Transfer Students

Students transferring from another institution and seeking a degree in Psychology must complete 21 hours of Psychology courses at Colorado State University-Pueblo with a minimum grade of $C$ in all psychology courses. Of these 21 hours, a minimum of 12 must be upper-division credit.

## Requirements for the Psychology Minor

- Twenty one credits of psychology, which must include PSYCH 100 and nine credits of upper-division coursework. Credits in PSYCH 492, 494 and 495 do not count toward the minor.
- A minimum grade of $C$ in all psychology courses counting toward the minor.
- PSYCH 491 may be taken once to count toward the minor.
- Transfer students must complete 9 credits upperdivision coursework in Psychology at CSU-Pueblo.


## Psychology Concentration under the Liberal Studies Major

In addition to PSYCH 151 and 342, which are required of all Teacher Education majors, the following courses will fulfill the requirements for the concentration in Psychology under the Liberal Studies Major.

| Course |  | Title |
| :--- | :--- | :--- |
| PSYCH 251 | Childhood and Adolescence ................. 3 |  |

This course is required of all Liberal Studies majors who choose Psychology as a concentration area.

Select nine credit hours from the following list: $\qquad$ .9

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| PSYCH | 220 | Drugs and Behavior...................... 3 |
| PSYCH | 231 | Marriage \& Family Relationships ... 3 |
| PSYCH | 311 | Theories of Personality ............... 3 |
| PSYCH | 336 | Learning and Motivation ............... 3 |
| PSYCH | 337 | Memory \& Cognition ..................... 3 |
| PSYCH | 352 | Social Psychology..................... 3 |
| PSYCH | 353 | Advanced Developmental |
|  |  | Psychology ................................ 3 |
| PSYCH | 362 | Abnormal Psychology .................... 3 |

$\begin{array}{lll}\text { PSYCH } & 463 & \text { Psychopathology of Childhood ....... } 3 \\ \text { PSYCH } & 465 & \text { Behavior Modification .................. } 3\end{array}$

## Career/Employment for Psychology Majors

Psychology is a diverse field with hundreds of career paths. Some specialties, like caring for mentally ill people, are familiar to most of us. Others, like studying how we know and remember things, are less well known.

Across the nation, psychology is the second most popular undergraduate major, even though many of those who choose psychology as a major may not be interested in psychology as a career. About 10 percent of psychology majors pursue graduate training and at CSU-Pueblo there is excellent preparation available for students wishing to apply to graduate programs in psychology.

For those students who do not wish to become professional psychologists, many jobs are available. Psychology is a valuable major for a Liberal Arts degree. Jobs are found in various sectors of society and psychology graduates are most often employed as interviewers, counselors, mental health workers, human service practitioners, personnel analysts, probation officers, and writers. Employers find that psychology graduates possess strong people skills and psychology majors also value these skills themselves.

Psychology majors cite courses in the principles of human behavior as especially important to life after college. Additional insight gained from these courses into what motivates people to perform at their peak helps them, whether they are functioning as parents at home, coaching athletics, or managers on the job.

Training in the scientific method - the requirement to do thorough, objective research, analyze data logically, and put forth the findings with clarity - stands psychology majors in good stead as they pursue future careers.

## Outcome Assessment Activities

- The presentation of an empirically-based research project immediately following PSYCH 209/209L. Each student presentation will be evaluated with the use of the Research Presentation Evaluation Form by psychology faculty.
- The use of counseling skills in a clinical field experience. Each student will be evaluated by the field experience agency and the psychology field coordinator with the use of the Field Experience Evaluation Form.
- An alumni survey is conducted every 5-7 years to assess the relevance of psychology courses in career development.


## SOCIAL WORK DEPARTMENT

Department Chair: Ralph Woehle<br>Faculty: Baca, Gonzales, Lucero, Reilly-Sandoval, Richmond

The profession of social work is dedicated to helping individuals, families, groups, neighborhoods and communities meet basic human needs within the context of culture and society. Fundamental to social work practice is the enhancement of social functioning from a person-inenvironment perspective. Particular attention is given to populations at risk, services that have been developed to meet client needs, and societal change to achieve a more humane and just society.

The Department of Social Work has been continuously accredited by the Council on Social Work Education (CSWE) since 1982. Students who earn a BSW degree from Colorado State University-Pueblo may be eligible for advanced standing in a social work graduate program. However, requirements for advanced standing vary with each graduate social work program.

## Mission Statement

"As part of Colorado State University-Pueblo, a regional comprehensive university, the social work program prepares students for beginning generalist practice with diverse client populations across systems of all sizes, including individuals, families, groups, organizations, and communities."

## Program Goals and Objectives

1. Provide BSW students with a range of skills, attitudes, and knowledge grounded in social work values and ethics.

## Objectives

- Students will apply social work values and ethics to social work practice with diverse systems.
- Students will evaluate the professional use of self in interactions with diverse systems.

2. Develop culturally competent professionals who can intervene appropriately in systems of all sizes with emphasis on regional populations.

## Objectives

- Students will develop culturally competent knowledge, values and skills for beginning level social work practice with diverse systems.
- Students will demonstrate the ability to practice with diverse populations in a multicultural environment including Chicanos, Mexicans, and First Nations.

3. Develop the ability of BSW students to advocate for social and economic justice with systems of all sizes.

## Objectives

- Students will identify factors which impact the attainment of social and economic justice for diverse systems.
- Students will select and apply appropriate intervention methods to develop and enhance social and economic justice across diverse systems.

4. Engage BSW students in a process of practiceinformed research and research-informed practice.

## Objectives

- Students will use critical thinking skills to develop knowledge and understanding of research relevant to beginning social work practice with diverse systems.
- Students will interpret, evaluate and implement relevant research, linking theory to practice, as they engage in beginning level social work practice with diverse systems.


## Student Learning Outcomes

Upon completion of the Baccalaureate Social Work Program, students will

- Identify as professional social workers.
- Apply social work ethical principles to guide professional practice.
- Apply critical thinking to inform and communicate professional judgments.
- Engage diversity and difference in practice.
- Advance human rights and social and economic justice.
- Engage in research-informed practice and practiceinformed research.
- Apply knowledge of human behavior and the social environment.
- Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
- Respond to contexts that shape practice.
- Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.


## Outcomes Assessment Activities

The faculty of the Department of Social Work uses a variety of methods for evaluating the student learning outcomes. These include a senior field placement consisting of 448 clock hours under the supervision of a task/field supervisor and with a faculty liaison. An assessment of the field experience completed by the field supervisor is a direct measure. During the field seminar, students will complete and collect artifacts for a portfolio which will be submitted for blind evaluation of academic content by faculty. Students will complete a self-report survey where each learning outcome and associated practice behaviors are measured indirectly. In addition in the last term of the field experience, students must complete a standardized knowledge-based assessment. Embedded assessment measures include presentations, papers, projects, and conducting individual and group practice sessions. In addition, employer and alumni surveys are systematically administered as part of assessment. The results of these assessment activities are used to improve the program and student learning.

## Requirements for the Social Work Major

## General Education Foundation Courses

General Education................................... 35 credit hours
As a base for professional intervention, social work practice requires mastery of knowledge and skills commonly taught in the liberal arts. Students planning to major in social work should select general education courses that develop proficiency in verbal and written communication, competency in problem solving, and promote critical and analytical thinking. Courses that incorporate human growth and behavior, diversity, and the interaction of individuals, groups, neighborhoods, communities and society, within the context of social, economic, political, and governmental systems, provide a substantive base for majors. Students should complete the University's general education requirements prior to enrollment in upper division social work courses.

Professional Foundation Courses......... 37 credit hours

Specified courses .21
Basic social work courses ..............................................................................

## Other Related Requirements

No academic credit is awarded for life experiences in this program.

Transfer students may be required to submit a copy of course descriptions and/or course syllabi for review to determine acceptance of credits for social work and related courses.

There are no test out exams for social work courses. Independent study courses with SW prefix may not be substituted for required courses.

## Social Work Foundation Courses

A grade of $C$ or above must be earned in all courses required by the major.

The following specific courses are required as foundation for enrollment in upper division social work classes.

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | ---: |
| PSYCH | 100 | General Psychology ............................... 3 |  |
| SOC | 101 | Intro to Sociology........................... 3 |  |

The following courses may be taken concurrently with 300-level social work courses:


TOTAL 21

Courses in the social work curriculum are provided in the areas of human behavior and the social environment, social welfare policy and services, social research, social work practice and field practicum. Learning takes place in the classroom and in approved agency settings under supervision. Early in the curriculum students learn about social agencies and the roles of social service providers through a volunteer placement for 45 clock hours in an approved agency for a social work class, Introduction to Social Work Practice (SW 222). Some courses in the major must be taken in sequence because knowledge in higher level courses is built on the mastery of information in previous courses.

| SW Courses | Titles | Credits |  |
| :--- | :---: | :--- | ---: |
| SW | 100 | Intro to Social Work ............................ 3 |  |
| SW | 201 | Human Behavior \& Social <br> Environment I ....................................... 3 |  |
| SW | 202 | Human Behavior \& Social |  |
|  |  | Environment II .................................... 3 <br> SW <br> SW <br> SW <br> SW | 222 | | Social Welfare in the U.S................. 3 |
| :--- |
| Intro to Social Work Practice ............... 3 |

TOTAL 16

## Admission into the Social Work Program

The social work major is a professional program and as such requires two additional admission processes following admission into the University: the first is admission into the social work program and the second is admission into the field practicum. Social work majors should be accepted into the program prior to enrolling in required $\mathbf{3 0 0}$ and 400 level social work courses.

Application forms are available in the BSW Student Handbook, on the website, or from the social work department administrative assistant on the Pueblo campus. Completed application forms are to be submitted by November 1st for the upcoming spring semester, by April 1st for the upcoming summer session, and by July 1st for the upcoming fall semester. Applications for admission are accepted any time during the year, but no later than the deadlines noted for each term. Faculty review applications and a decision is made regarding admission into the program. The Department Chair will notify each student in writing of his/her status: 1) admission into the program, 2) conditional admission into the program or 3 ) denial of admission into the program.

Reasons for conditional admission into the program will be identified in the letter, as well as corrective actions that must be taken. Students who are conditionally admitted will have their progress followed by the Department Standards and Academic Progress Committee. This committee will also receive referrals from instructors within the department and from the department chair. Such referrals may include issues of academic or behavioral nature. (See the department student handbook for a complete description of this committee and its functions.) When the requirements for admission into the program have been satisfied, the student's status will be revised from conditional acceptance to admission into the program. If for some reason a student is not admitted to the program, the reasons for this decision will be identified in the letter to the student, along with necessary corrective actions. Reapplication may be made once corrective action has been taken.

## Social Work Professional Practice Courses

Students must earn a grade of $C$ or above in all social work professional practice courses. The following upper division social work courses are mandatory for completion of the BSW degree and require acceptance into the major prior to enrollment.

| SW Courses | Titles | Credits |
| :--- | ---: | :--- | ---: |
| SW | 310 | Social Work Theory ............................ 3 |
| SW | 320 | Human Diversity in Practice................. 3 |
| SW | 322 | Social Work Intervention I ................... 3 |
| SW | 323 | Social Work Intervention II ................ 3 |
| SW | 324 | Social Work Intervention III ................ 3 |

SW 350

Social Welfare Policy ............................ 3

SW 481
SW 482
SW 488
SW 489
SW 492

Field Seminar I .................................... 3
Field Seminar II .................................... 3
Field Placement I.................................. 5
Field Placement II ................................ 5
Research ............................................... 3

TOTAL 37

## Admission into the Social Work Field Practicum

## The Field Practicum

Social work majors are required to apply for admission into the field practicum. All social work courses must be completed prior to entering field. Two orientation meetings are scheduled by the Field Coordinator each fall and spring semester for all students planning to enroll in the field practicum during the following summer session or fall semester. Application forms for admission into the practicum are distributed at this meeting and information on the admission process and placement is provided. Students unable to attend are required to meet with the Field Coordinator to obtain the forms and receive pertinent information to proceed with the practicum placement process.

Completed applications must be returned to the Field Coordinator at the time of your interview. The application will be reviewed and the student will be notified of acceptance into the field practicum by the Field Coordinator. Late submission of the application may delay both placement into the practicum and graduation since most field practicum agencies require background checks and/or drug and alcohol testing. Students need to be aware that a criminal history may affect eligibility for placement based on agency policy, not University policy or the Department of Social Work polices.

The Field Coordinator is required to make a reasonable effort to assist a student in securing a placement. The social work student, however, not the University, is ultimately responsible for being eligible and retaining a placement under the direction of the Field Coordinator. Students unable to obtain acceptance into an approved placement after three attempts, or successfully complete a practicum, will not be awarded the BSW degree and are advised to change to a major in which they can meet degree requirements.

Students are required to complete a minimum of 448 clock hours of professionally supervised field work in an approved community social service agency.

## RETENTION IN THE SOCIAL WORK MAJOR

Students may be denied acceptance or withdrawn from the major or field placement for either academic or behavioral reasons.

## Academic Requirements

Students must maintain specific academic standards for admission into the major, continuation in the program, and field practicum for graduation. By University policy, students are required to maintain a minimum cumulative grade point average of 2.0 for graduation. In the social work major, a minimum GPA of 2.5 is required (professional foundation and professional practice courses). All courses designated with a SW prefix and the non-social work foundation courses must be completed with grades no lower than a C. If an individual does not take any social work courses for one calendar year, the individual must reapply for admission to the major.

## Behavioral Requirements

Behaviors which may result in non-acceptance into the major, field practicum, or withdrawal from the social work major may include, but are not limited to, the following:

1. Serious or repeated violation of the NASW Code of Ethics and Standards of Practice;
2. Violation of CSU-Pueblo's academic dishonesty policy or Student Code of Conduct;
3. Unprofessional social work conduct;
4. Demonstrated unwillingness or inability to use supervision;
5. Personal problems that seriously and consistently interfere with the conscious and professional use of self in a helping relationship;
6. Inability to accept appropriate evaluation from superiors or to modify one's professional behaviors as requested;
7. Inappropriate or disruptive behavior toward colleagues, faculty, staff or peers; and/or
8. Consistent failure to demonstrate interpersonal skills necessary to form effective professional relationships.

See student handbook for more information.

## Electives

A minimum of 120 semester credit hours are required for the BSW degree. At least 40 hours must be taken in upper division (300-400 level) courses. Students may use social work elective courses or courses from other departments to achieve the total credit hours required. Social work faculty advisors can assist in the selection of electives.

# SOCIOLOGYIANTHROPOLOGYI SOCIAL SCIENCE DEPARTMENT 

(Including Criminology)

Department Chair: S. Calhoun-Stuber

Faculty: Calhoun-Stuber, Forsyth, Gomme, Green, McGettigan, Messer

## Mission Statement

The Department of Sociology, Anthropology and Social Science is committed to the principles of a liberal education. Our central objective is to teach and communicate the sociological and anthropological ways of viewing the world. The programs in sociology, sociology/criminology, anthropology, and social science are intended to increase the student's knowledge of social organization and social relationships and to assist students in developing skills in the processing, integration and utilization of knowledge, rather than its simple transfer. Our curriculum reflects the long-standing interest of our disciplines in examining the human condition and understanding stability and change in social life. The department prepares students to work in a wide variety of occupations or to pursue professional or graduate studies. Our mission is to produce graduates who are motivated and equipped to make meaningful contributions to the enhancement of the human condition.

The department's mission relates to the mission of the College of Humanities and Social Sciences in the following ways: (a) the department programs provide classroom environments that stimulate critical thinking and assist students to further develop critical thinking skills; (b) social action and responsibility, personal morality and accountability, and professional ethics are focused on throughout the curriculum in classes that examine the interplay between individual agency and social influence; (c) the broad disciplines within the department are committed to producing motivated and socially aware graduates equipped to make meaningful contributions within a diverse community and increasingly interdependent world.

## SOCIOLOGY

Sociology is the study of human social behavior and is concerned with conditions such as crime and delinquency, family interaction and conflict, social inequality, social change, and organizations in contemporary post-industrial society. Sociologists are interested not only in understanding social issues and institutions, but also in resolving social problems and improving social conditions for human populations. The insights gained from a sociological perspective include the ability to perceive the
structures and patterns upon which everyday life rests, to understand the interaction between individual agency and social forces, to interpret events from diverse perspectives, and to examine existing social arrangements critically.

The sociology major prepares students to work in a wide variety of occupations, including education, government, business, industry and private human service agencies. Sociology graduates are employed in such areas as social research, health care, youth services, drug rehabilitation, law enforcement, corrections, probation, counseling, community advocacy, program development, policy analysis, and victim services. Students may earn a general sociology major, or they may specialize within the criminology emphasis area.

## CRIMINOLOGY EMPHASIS

The criminology emphasis is designed to prepare students for careers or graduate programs in various criminal justice-related fields including law enforcement, investigations, victim advocacy, restorative justice, community corrections, institutional corrections, research, policy analysis, and court management and administration. Sociology/criminology majors are expected to gain the ability to understand and apply both sociological and criminological theories to an analysis of crime and deviance, juvenile delinquency, crime measurement, policy and the official response to crime in contemporary society. Courses offered in the emphasis area maintain a continual focus on ensuring respect for diversity and a commitment to social responsibility.

Since sociology and sociology/criminology graduates enter into a wide range of professional, administrative, policyoriented, research, educational, human service, and other occupational areas, the sociology program seeks to create a learning environment that engages students in their own learning and within which students may liberate themselves from ideological and social conditions that limit human potential. Through the study of sociology, students gain skills that enhance their ability to assess new and unfamiliar situations, to select and apply a range of analytic techniques in solving problems in creative ways, and to communicate effectively.

## Student Learning Outcomes

The student learning outcomes apply for both the BS and BA degrees in Sociology.

Upon completion of a BA or BS degree in Sociology (General Emphasis):

- Students will be able to comprehend and criticize the major theoretical perspectives that inform modern sociological thought. Specifically, students will be
able to (a) show what these perspectives have in common and how they differ and (b) critique these different perspectives in terms of their explanatory strengths and weaknesses for purposes of understanding what each reveals and obscures about the subjects of sociological inquiry.
- Students will learn to apply a range of research methods in conjunction with sociological theory in order to explain and analyze complex social relations and organization. Specifically, students will be able to demonstrate that they can: (a) identify, define, and give examples of various methods used in sociological research on contemporary societies, and (b) recognize and interpret research methodologies used in sociological literature.
- Students will learn to apply social analysis to substantive social issues and problems, including such areas as race, gender, power, inequality, and globalization. Specifically, they will be able to apply sociological theories and methods in these substantive areas in order to understand social problems and inform social policy.
- Students will be able to engage in critical thinking about various aspects of social life and organization.

Upon completion of a BS or BA degree in Sociology (Criminology Emphasis):

- Students will be able to comprehend and criticize the major theoretical perspectives that inform modern sociological and criminological thought. Specifically, students will be able to: (a) show what these perspectives have in common and how they differ and (b) critique these different approaches in terms of their explanatory strengths and weaknesses for purposes of understanding what each reveals and what each obscures.
- Students will learn to apply a range of research methods in conjunction with sociological and criminological theory in order to explain and analyze complex social relations and organizations. Specifically, students will be able to demonstrate that they can: (a) identify, define, and give examples of various methods used in sociological and criminological research on contemporary societies, and (b) recognize and interpret research methodologies used in sociological and crime and deviance literature.
- Students will learn to apply social analysis to substantive social issues and problems, emphasizing crime and deviance, but also including race, gender, inequality, power, and globalization. Specifically, they will be able to apply sociological and criminological theories and methods to these substantive areas in order to understand social problems, in particular crime and deviance, and inform crime-related social policy.
- Students will be able to engage in critical thinking about various aspects of social life and organization, including crime and criminal justice institutions.


## Outcomes Assessment Activities

The primary method of assessment for the Sociology program is the Major Field Test (MFT). Developed by the Educational Testing Services, this standardized testing instrument assesses student capacities in a number of critical areas of sociology: general theory, methodology and statistics, deviance and social problems, demography and urban/rural community, multiculturalism, social institutions, social psychology, gender, and globalization. It also assesses two additional learning capacities: core sociology and critical thinking.

MFTs are completed annually by a sample of graduating seniors. Test outcomes are compared to those of other students at other American universities in order to identify the sociology program's strengths and weaknesses. The results of these assessment processes are used to improve the program and further enhance student learning.

A secondary method of assessment for the Sociology program comprises a customer satisfaction survey distributed to all graduating seniors. Respondents report their qualitative perceptions of the adequacy of customer services (teaching, advising, learning supports, internships, etc.), the degree of learning, skill acquisition, discipline mastery, and the sufficiency of vocational training. Survey results are used to bolster customer service initiatives and to strengthen curricular delivery systems.

A sociology major leads to either a Bachelor of Arts (BA) or a Bachelor of Science (BS) degree.

## Requirements for a Bachelor of Science Degree in Sociology or Sociology/Criminology

Students must complete all the major degree requirements. The Bachelor of Science degree is designed for those pursuing an applied, career-oriented program and for those interested in pursuing graduate studies in criminal justice or applied sociology programs.

Requirements for a Bachelor of Arts Degree in Sociology or Sociology/Criminology

Students must complete all the major degree requirements. In addition, students must complete the foreign language requirement as specified in the Academic Policies section of the University Catalog. This requirement specifies that the student complete one of the following three options: (a) the second level of a foreign language, (b) completion of FL 100 and ANTHR/ENG 106,
or (c) completion of the first and second level of American Sign Language. The BA degree in Sociology or Sociology/Criminology is appropriate for students interested in pursuing graduate studies in sociology or criminology programs or who plan to attend law school.

## Major Requirements

- Successful completion of the sociology core;
- Successful completion of the general or the criminology emphasis areas;
- No grade below a C in sociology courses is acceptable for the major or the minor; and
- Completion of at least 36 credit hours in approved sociology courses.


## Specific Requirements for the Sociology Major <br> CORE

| SOC Courses |  | Titles | Credits |
| :--- | ---: | :--- | ---: |
| SOC | 101 | Introduction to Sociology ................ 3 |  |
| SOC | 301 | Sociological Methods ............... 3 |  |
| SOC/ANTHR | 310 | Social \& Cultural Theory ............ 3 |  |

$\overline{\text { TOTAL } 9}$

## General Emphasis

Students will complete the above core (9 hours) and then will select at least 27 additional credit hours of sociology courses, which may include six hours from anthropology. Courses must be approved by the advisor. At least 12 hours must be upper-division courses (300-400 level).

## Criminology Emphasis

Students will complete the three (above) core sociology courses plus three (below) criminology core courses. Further, they will complete 18 hours (six courses) of criminology electives.

Criminology electives are indicated by * in the list of all sociology courses below:

## Criminology Core Courses: (9 hours)

| SOC Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| SOC | 203 | Criminal Justice System ...................... 3 |
| SOC | 303 | Crime and Deviance .......................... 3 |
| SOC | 306 | Delinquency \& Juvenile Justice .......... 3 |

## Sociology Courses (*indicates criminology elective)

## SOC Courses Titles

SOC/POLSC/PSYCH/WS
105 Understanding Human Diversity
SOC 155 Minority and Ethnic Relations*

| SOC | 201 | Social Problems* |
| :---: | :---: | :---: |
| SOC | 203 | Criminal Justice System |
| SOC | 206 | Gender \& Society |
| SOC/ANTHR | 212 | The Forensics of Bones* |
| SOC/PSYCH/WS |  |  |
|  | 231 | Marriage \& Family Relationships |
| SOC/ANTHR | 250 | The Sacred in Culture |
| SOC/ANTHR | 252 | Culture and Personality |
| SOC | 302 | Collective Behavior and Social Movements* |
| SOC | 303 | Crime and Deviance |
| SOC/WS | 305 | Crime and Women* |
| SOC | 306 | Delinquency \& Juvenile Justice |
| SOC | 308 | Popular Culture* |
| SOC | 304 | Race and Crime* |
| SOC/PSYCH | 352 | Social Psychology |
| SOC | 353 | Penology* |
| SOC | 354 | Urban Sociology* |
| SOC | 355 | Political Sociology* |
| SOC | 356 | Social Stratification* |
| SOC | 358 | Film \& Society* |
| SOC | 359 | Community Corrections* |
| SOC/ANTHR | 401 | Health, Culture, \& Society |
| SOC/ANTHR | 402 | Aging, Culture, \& Society |
| SOC/WS | 403 | Human Sexuality and Social Behavior |
| SOC | 404 | Poverty* |
| SOC | 405 | Law and Society* |
| SOC/WS | 407 | Family Violence* |
| SOC | 408 | Science, Technology, \& the Future* |
| SOC | 409 | Victimology* |
| SOC | 410 | Structural \& Elite Crime* |
| SOC | 411 | Police and Society* |
| SOC | 413 | Patterns of Homicide* |
| SOC | 414 | Serial Murder * |
| SOC | 415 | Forensic Criminology* |
| SOC/ANTHR | 416 | Crime \& the Mind* |
| SOC | 417 | Forensics \& Homicide Investigations* |
| SOC | 418 | Crime, Drugs and Social Policy* |
| SOC | 419 | Vice Crime* |
| SOC | 420 | Explaining Crime* |
| SOC | 421 | Homicide, Courts \& Corrections* |
| SOC | 422 | Terrorism and Mass Murder* |
| SOC | 424 | Organized Crime* |
| SOC | 426 | Violence and Rioting* |
| SOC/HIST/WS | 428 | Women and Work |
| SOC | 431 | Work in Modern America* |
| SOC | 432 | Organization Theory* |
| SOC | 440 | Correctional Administration* |
| SOC | 448 | Emotions in American Culture |
| SOC | 450 | Soc of Mental Health and Suicide* |
| SOC/ANTHR | 451 | Culture, Deviance, \& Psychopathology* |
| SOC/ANTHR | 452 | Self and Society |
| SOC/WS | 453 | Sociology of the Body |
| SOC/WS | 455 | Hate Crimes* |
| SOC | 491 | Special Topics* (see advisor) |
| SOC/ANTHR | 492 | Research Methods* |
| SOC | 494 | Field Experience* (see advisor) |
| SOC | 495 | Independent Study |

## Specific Requirements for the Sociology Minor

Minors in sociology require a minimum of 20 semester hours, of which six hours must be upper division. SOC 101 is required. No grades below C are accepted toward the minor.

## Co-Curricular Requirements

Generally there are no co-curricular requirements, although students with an emphasis in criminology are encouraged to complete an internship in a criminal justice agency or program.

## ANTHROPOLOGY

The anthropology minor provides students with an informed understanding of the cultural diversity evident in human societies and the concepts by which anthropologists explain cultural dynamics. The program emphasizes a holistic awareness of the relationships of all the parts of social and cultural systems. The program prepares students to understand anthropological methods and theories and to apply them to life experiences.

## Program Mission

The Anthropology program complements the mission of the Department and the College through focusing on analysis of the relationship among psychology, culture, and society within a cross-cultural context and emphasizing the features and consequences of human evolution. The mission of the Anthropology minor is to provide students with an understanding of the nature and adaptive role of cultural diversity in contemporary society and throughout the history of human development. A corollary of this mission is helping our students see the relevance of anthropological methods and knowledge in different contexts and different stages of their lives as individuals and citizens. We strive to provide students with intellectual tools that can help them think critically about human behavior, cultural development, and social organization while preparing them to apply this disciplinary knowledge in their personal and professional lives.

Anthropology minors acquire a systematic exposure to cross-cultural contexts, psychocultural aspects of human group life, and critical evolutionary concerns. Students who successfully complete the minor will be able to understand and apply basic anthropological concepts and formulate reasonable arguments related to questions addressed by the discipline at large - such as the past, present, and future of human cultural diversity; the nature of human biological, psychological, and social evolution; and the evolutionary basis of human behavior.

## Program Goals and Objectives

- Provide students with background in the concepts and bodies of knowledge used and produced by anthropologists so students will learn the basic core concepts of anthropology and cite factual evidence to support their arguments on major topics under debate in the discipline.
- Provide students with training on the application of anthropological theory and method, enabling students to demonstrate knowledge of history and contemporary trends in anthropological theory, and the ability to apply theoretical approaches to concrete problems.
- Prepare students to apply anthropological concepts to real world problems and effectively communicate results and to increase students' abilities to think and write critically about anthropological concepts.


## Student Learning Outcomes

## Upon completion of the Anthropology program

- Regarding cultural diversity - The student should be able to accurately recognize and describe a range of different cultures based on ethnographic data from a variety of sources, including documentary films, scholarly articles, and books.
- Regarding familiarity with psychological terms and dynamics - The student should be able to accurately apply psychological concepts to human sociocultural behavior and to identify the developmental experiences that produce the psychological processes so labeled (e.g., psychological defense mechanisms or psychosomatic symptoms).
- Regarding sociocultural processes - The student should be able to accurately apply anthropological concepts to identify group processes and properly describe them in specific group and ecological settings (e.g., scapegoating or political authority). Students will effectively communicate how to utilize anthropological knowledge to analyze and solve practical problems.
- Regarding the consequences of human evolutionThe student should be able to cite accurately the archaeological evidence for, and the consequences of, the evolution of the human species. This includes describing and recognizing: (1) the mental, anatomical, ecological, and social changes that led to the appearance of modern humans, and (2) the theoretical principles of evolution that justify inferences about the changes (e.g., identify a Homo erectus cranium or describe punctuated equilibrium).
- Regarding the ideology of political economy in human history - The student should be able to recognize and describe the various stages of power and its control of goods and services as manifested in the history of human groups (e.g., distinctions among band, tribe, chiefdom, and state). Students will illustrate key
terms, concepts, and forms of argumentation used in anthropological discourse and evaluate their validity in examining human behavior and social systems.


## Outcomes Assessment Activities

Assessment of the Anthropology minor is the responsibility of the program faculty.

Anthropology minors' performance on each of the program's student learning outcomes will be assessed on a 2-3 cycle. Assessment results will be used to identify program strengths and to discern areas needing improvement to enhance student performance in relation to the student learning outcomes.

## Specific Requirements for the Anthropology Minor

The minor consists of 21 semester hours of anthropology courses; ANTHR 100 is required, and six hours must be upper division. The rest of the courses may be based upon the student's interest. No grades below $C$ are accepted toward the minor.

## SOCIAL SCIENCE PROGRAM (Offered through Continuing Education only)

The interdisciplinary major in social science (offered only through Continuing Education) leads to the degrees of Bachelor of Arts (BA) and Bachelor of Science (BS).

Social scientists study people and social institutions, especially the relationships and impacts they have with and on each other. Research in the social sciences provides insights that help in understanding the ways in which individuals and groups make decisions, exercise power or respond to change. Social scientists gather and analyze data, interpret it and make it meaningful and useful for application in dealing with human problems.

Employment has traditionally been in the academic area; however, as the economy continually changes from an industrial to a service-oriented system, a greater need for -甲ople-oriented" specialists is developing. Job opportunities in applied fields include areas such as program management and administration, residential counseling, service supervision, human services and sales and related work -- in both the public and private sectors. Related careers are: teaching, corrections/ criminology, social and educational administration, law and mass communications.

## Program Mission

A major in social science provides the framework for supporting an innovative, multidisciplinary study of people and social institutions, from both historical and
contemporary perspectives, focusing on the relationships and impacts they have with and on each other.

The program's core curriculum embodies the multidisciplinary nature of a social science degree. The Social Science Program is designed around the idea that the boundaries between disciplines form ground for creative and innovative research and knowledge. The program's structure allows self-directed students to design an individualized program of study that rests on a core foundation and complements their academic, professional and personal goals. Students are challenged to engage in intellectual exploration and responsible educational innovation. The curriculum draws on established bodies of thought in the social sciences to address questions and issues relevant in a rapidly changing environment. The multidisciplinary core of the social science program provides the conceptual framework within which students gain an appreciation of multiple perspectives while developing skills in the processing, integration, and utilization of knowledge. The social science program prepares its students to function as knowledgeable, responsible and engaged citizens with a comprehensive understanding of modern social, political, and economic institutions. Through the study of social science, students learn about human adaptation, institutional conflict, and social change, preparing them for careers in a rapidly changing, global economy. The social science programs' curricula are designed to provide students with a fundamental understanding of the major disciplinary approaches to the study of social life, including anthropology, economics, geography, history, political science, and sociology. Students are expected to be able to demonstrate the ability to recognize the interconnections between the different disciplines within the major as well as develop an understanding of the unique perspective each offers.

These skills enhance the student's ability to assess new and unfamiliar situations, to select and apply qualitative or quantitative techniques in solving practical problems in creative ways, and to communicate effectively. The program promotes critical inquiry, cultural and selfawareness, and the examination of ethical issues in order to prepare students to be productive professionals. The multidisciplinary curriculum engages students with an educational framework that enriches their personal lives and provides a foundation for socially responsible citizenship.

## Program Goals and Objectives

To prepare graduates with a major in the discipline to be able to:

- Demonstrate the ability to recognize the interconnection between the different disciplines within the major.
- Demonstrate the ability to integrate and apply the theoretical perspectives and research methods from cultural anthropology, history, political science, economics, geography, and sociology.
- Demonstrate the ability to continue to develop an understanding of cultural diversity and selfawareness.


## Student Learning Outcomes

Upon completion of the social science degree will:
Think critically, such that the student will be able to:

- Define theory and describe its role in building social science knowledge.
- Compare and contrast foundational theories and essential perspectives and their underlying assumptions in the core social science disciplines.
- Explain how theories and perspectives reflect the historical context of times and cultures in which they were developed.
- Select one or more basic theoretical orientations or perspectives and apply them to a current or historical event or series of events.
- Differentiate key cultural, economic, political, and social phenomena that influence individuals and social structures and illustrate their impacts, both historically and currently.

Demonstrate an understanding of the role of evidence and qualitative and quantitative methods in the social sciences, such that the student will be able to:

- Distinguish between qualitative and quantitative methods, critically assess research publications, and explain how studies can be modified or improved.
- Identify basis methodological approaches and describe the ways in which various methods contribute to cumulative social science knowledge.
- Compare the strengths and weaknesses of each discipline's methodology in analyzing cultural, economic, social, and political problems and developing solutions.

Communicate effectively, such that the student will be able to:

- Express oneself in a clear and coherent manner in writing.
- Express oneself in a clear and coherent manner in oral presentation.

Demonstrate self awareness, cultural competence and social action, as well as an appreciation of multiple perspectives, such that the student will be able to:

- Show how patterns of thought and knowledge, including one's own, are directly influenced by culture, history, geography, and economic, political and social structures.
- Compare and contrast micro and macro perspectives and illustrate how each explains the status and experiences, past and present, of minority or marginalized groups.
- Interpret how historical and social contexts create diverse groups and identities and shape the role of the individual within society and human relations across cultures.

Relation to Program Mission: Promoting self awareness, cultural competence, and social act ion enriches students' personal lives and provides a foundation for socially responsible citizenship. Through the study of micro and macro perspectives students comprehend the significance and implications of socially situated identities and foster in others an appreciation of diverse human experiences.

## Outcomes Assessment Activities

Assessment of the Social Science program is the responsibility of Social Science program faculty. The Social Science program is offered only through the Continuing Education's Independent Study program.

A central file of course syllabi with representative assignments is maintained in the Department of Continuing Education for inspection by faculty. A faculty advisor monitors each student's progress toward completing major requirements listed in the catalog.

The faculty of the Social Science program use a variety of methods for evaluating the student learning outcomes. These include the following direct measures of student learning: major papers written for courses in the discipline and proctored exams. An indirect method of assessment for the Social Science program consists of a student satisfaction survey distributed to graduating seniors each year.

## General Requirements

- No grade below $C$ is acceptable in the major or minor.


## Specific Requirements for the Social Science Major

## General Track Credits

Social Science Core
Courses Titles Credits
ANTHR 100 Cultural Anthropology ............................ 3
ECON 201 Principles of Macroeconomics ............... 3
GEOG 103 World Regional Geography ................... 3

HIST 103 World Civilization since 1800................ 3
HIST 202 US History II .......................................... 3
POLSC 101 American National Politics .................... 3
SOC 101 Introduction to Sociology ...................... 3
SUB-TOTAL 21
Social Science Electives (Upper Division)....................... 15

TOTAL 36

## Specific Requirements for the Social Science Minor

- Completion of 21 semester hours of credit in Social Science courses: Anthropology Economics, Geography, History, Political Science, Psychology, Sociology. Six hours must be upper division.


## SPEECH COMMUNICATION

Speech Communication courses (speaking and listening, sign language, and gender communication emphasis) are offered within the Department of English and Foreign Languages.

For information contact the Chairperson of English and Foreign Languages, Cynthia Taylor, at (719) 549-2312.

## WOMEN'S STUDIES

## Mission

The Women's Studies program exists to offer students a different perspective for understanding their disciplines, themselves, and others. Based on feminist theory, this perspective incorporates issues of race, ethnicity, class, sexuality, and other dimensions of human diversity.

## Student Learning Outcomes

Students will be able to:

- Demonstrate a working knowledge of women's participation in, contribution to, and transformation of areas of social life including culture, society, politics, economics, and religion.
- Demonstrate a working knowledge of institutionalized discrimination and violence based on gender.
- Demonstrate a critical understanding of gender from national and global perspective.
- Demonstrate and apply the basic concepts, theories and methods in gender studies in national and global contexts.


## Outcome Assessment Activities

- An annual review of student's capstone projects is conducted to evaluate the programs goals and student learning outcomes.


## Specific Requirements for the Women's Studies Minor

Courses
WS
WSt
Must take two of the following courses ............................ 6
Women's Studies Electives ..... 9
TOTAL 21

## WS Electives:



| WS | 492 | Research ....................................2-6 Var |
| :--- | :--- | :--- |
| WS | 494 | Field Experience....................2-6 Var |
| WS | 498 | Internship..........................2-6 Var |

## Cross Listing

Most Women's Studies courses are cross-listed, meaning that the courses can be found in the course listings of both the Women's Studies program and one or more other departments. This is indicated above, for example, as WS/PSYCH 212, Sexism and Racism in America," indicating that the course is listed as both a Women's Studies course and a Psychology course. The courses can be taken by enrolling in either a Women's Studies call number or in another department's call number. To encourage breadth, students are required to choose electives in different cross-listed disciplines, with no more than two of their electives being cross-listed in the same department (for example, Psychology). A course taken for the Senior Capstone Experience may not be cross-listed. Grades below a C will not be accepted in classes counting toward the minor.

## Senior Capstone Experience

(WS 485, WS 490, 492, 494, or 498)
The Senior Capstone Experience allows the student to bring together women's studies disciplinary knowledge with 1) the major; 2) some other disciplinary perspective; or 3 ) a practical problem. The expectation is that in taking WS 490, 494, or 498 for the senior experience, the student will apply women's studies in a community-based setting. In certain cases, if the student's proposal is to combine the WS minor with the major, and the best option for that major is a 492 research project, the 492 may be approved, but only with the condition that the student presents the research in a public forum to meet the practical application component.

## Senior Capstone Experience Prerequisites

The Senior Capstone Experience will be open to students who have declared a WS minor, and have completed all the core requirements, i.e. WS 100 and two of the following (WS 301, WS/CS 306, WS/CS 401). Note: it is preferred that this capstone experience be taken in the senior year, after all other WS minor requirements have been met.

## Advising

Student should contact the Women's Studies Coordinator by calling 549-2138.

## COLLEGE OF SCIENCE AND MATHEMATICS

Dr. Richard Kreminski, Dean

## Academic Departments

## Biology

Majors: Biology (BS)<br>Emphasis Areas:<br>Biology Secondary Certification<br>Biomedical Science<br>Pre-Chiropractic<br>Pre-Dental<br>Pre-Medical<br>Pre-Occupational Therapy<br>Pre-Optometric<br>Pre-Pharmacy<br>Pre-Physical Therapy<br>Pre-Physician Assistant<br>Pre-Podiatric Medicine<br>Pre-Veterinary<br>Cellular and Molecular Biosciences<br>Bioinformatics<br>Medical Terminology<br>Environmental Biosciences<br>Environmental Health<br>Environmental Technology<br>Pre-Ecology<br>Pre-Forestry/Wildlife<br>Biology (MS)<br>Biochemistry (MS)<br>Minors: Biology<br>Professional Biology

## Chemistry

Majors: Chemistry (BS)
Emphasis Areas: ASC Certified Biochemistry Pre-Medicine
Pre-Pharmacy
Pre-Veterinary
Secondary Teaching Certification
Chemistry (MS)
Biochemistry (MS)
Minor: Chemistry

## Mathematics and Physics

Majors: Mathematics (BA, BS)
Emphasis Area:
Secondary Certification
Physics (BS)
Emphasis Areas:
Biophysics
Chemical

## Engineering

Physical Science Secondary Certification Physics Secondary Certification

Minors: Computational Mathematics
Mathematics
Physical Science
Physics

## Mission

The College of Science and Mathematics (CSM) offers quality, competitive Bachelor's and Master's degree programs that prepare graduates for success in professional and graduate programs and for careers in the biological and physical sciences and mathematics. The College also supports a strong general education program by providing core curricula in science and mathematics, for students pursuing careers in the health and environmental sciences, engineering, technology, and teacher education. The CSM provides advanced learning opportunities for students via faculty mentored research projects and internships that promote the discovery of new information and the application of new knowledge. The CSM supports the community, region and related professions through outreach including initiatives that enhance economic development, scientific literacy, and K12 education.

The College offers BS degree programs in biology, chemistry, mathematics, and physics, and a BA in mathematics. The BS in chemistry is certified by the American Chemical Society (ACS). The College also offers graduate programs in natural sciences with MS degrees in biochemistry, biology, and chemistry that can be obtained separately or along with the bachelors' degree in a combined five-year, $3+2$ program.

Departments of biology, chemistry, and mathematics/ physics provide versatile major programs with select emphasis areas and minors characterized by appropriate solid fundamental science and mathematics curricula, coupled with specialized and often interdisciplinary courses. Emphasis areas within major programs and minors provide preparation for future careers in areas as diverse as medicine, pharmacy, teaching (certification for elementary and secondary), environmental health and technology, computational mathematics, biophysics, bioinformatics, and many others.

In addition to offering a modern and career-oriented curriculum, academic programs provide opportunities for faculty-directed undergraduate and master-level research, and internships with local companies, government
laboratories and agencies. These experiences are critical to applied student learning and significantly enhance the success of graduates in gaining employment and acceptance into graduate and professional programs at the regional, state and national levels.

Academic programs in the College are housed in three recently renovated buildings, totaling over 149,000 gross square feet and $\$ 18$ million in improvements including a technology enhanced infrastructure to deliver state-of-theart instruction in both lecture and laboratory environments. Programs incorporate use of an impressive collection of advanced instrumentation, equipment, and software in the curriculum, providing graduates advanced skills and a competitive edge within respective professions in our modern and technologically advanced society.

## MASTERS DEGREE IN BIOLOGY 3+2 PLAN (BS/MS)

A feature of the Biology MS program is the $3+2$ plan which gives qualified advanced-level undergraduate students the opportunity to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. With this plan, students are moved quickly toward expanding their academic and scientific horizons based on the student's abilities and personal motivation. Students in the $3+2$ plan are expected to successfully complete the requirements for both the BS and MS degrees by the end of their fifth year in college. Students are simultaneously awarded both the BS and MS degrees in five years, thus shortening the normal time to receive both degrees from six years to five years. They must apply and be admitted into the Biology MS program by the Spring semester of their junior year (preferred) or by the start of the Fall semester of the senior year and meet the course requirements listed below. Students applying to the 3+2 plan must have a minimum 3.0 overall GPA and a minimum 3.25 GPA in their biology coursework.

The application file for admission to the $3+2$ plan must include:

1. A completed Biology MS application form;
2. A CSU-Pueblo transcript;
3. Two letters of recommendation from CSU-Pueblo faculty;
4. A statement of research interests; and
5. Satisfactory combined GRE scores above 300 (students may be admitted into the $3+2$ program before taking the GRE; however, they must submit satisfactory GRE scores by the last day of finals at the end of their first semester in the $3+2$ Biology MS program to remain in the program).

Before being admitted to the $3+2$ plan, students are expected to have completed or be enrolled in the following course work.

| Courses |  | Titles |
| :--- | :--- | :--- |
| BIOL | $301 /$ L | General Microbiology + Lab |
| BIOL | 350 | Mendelian and Population Genetics |
| BIOL | 351 | Molecular Biology and Genetics |
| CHEM | $302 /$ L | Organic Chemistry II + Lab |
| PHYS | $202 /$ L | Principles of Physics II + Lab |
| MATH | 156 | Introduction to Statistics |
|  |  | OR |
| MATH | 221 | Applied Calculus: An Intuitive Approach |

# BIOLOGY DEPARTMENT 

Department Chair: Brian Vanden Heuvel

Faculty: D. Caprioglio, H. Caprioglio, Diawara, Gabaldón, Herrmann, Martinez, Smith,

The major in biology leads to a Bachelor of Science (BS) Degree. The biology major is sufficiently flexible for students to prepare for a wide variety of professional careers. Carefully supervised career planning is a fundamental strength of the program.

The student majoring in biology may plan to enter the workplace upon graduation or continue study in graduate or professional school. Biomedical Sciences emphasis encompasses prep for pre-professional programs including: pre-chiropractic, pre-optometry, pre-physical therapy, pre-occupational therapy, pre-pharmacy, prephysician assistant, pre-podiatric medicine, pre-veterinary medicine, pre-dentistry, pre-medicine or pre-osteopathic medicine. Frequently, pre-professional study involves a combination of majors or a major and minor. For example, many pre-medical students choose a double major in biology and chemistry.

Each of the pre-professional programs has an advisor who can provide detailed and current information about the undergraduate work which the student should pursue to provide the foundation necessary for later entry into a professional school. The student should contact the specialized advisor as early as possible. A list of advisors is available in the departmental office (LS 210).

Biology majors also may seek teacher certification at the secondary level. Interested students may obtain a written description of specific degree requirements from the appropriate education and biology advisors. Biology students who are considering attending graduate school should take one year of a foreign language and should plan to take the Graduate Record Examination during the senior year.

The biology department offers several emphasis areas:

- Basic Biology
- Biomedical Science

Pre-Chiropractic
Pre-Dental
Pre-Medical
Pre-Occupational Therapy
Pre-Optometric
Pre-Pharmacy
Pre-Physical Therapy
Pre-Physician Assistant
Pre-Podiatric Medicine
Pre-Veterinary Medicine

- Environmental Biosciences

Environmental Health
Environmental Technology
Pre-Ecology
Pre-Forestry/Wildlife

- Cellular and Molecular Biosciences

Bioinformatics
Medical Technology

- Biology/Chemistry Double Major
- Biology Secondary Certification


## Department Goals

- To prepare students to become productive, accountable and responsible employees upon entering the work force;
- To prepare students to enter and succeed in graduate or professional schools;
- To develop in students a broad-based theoretical foundation supplemented by laboratory and field experience that allow individual observations, interpretations and applications; and
- To allow those students seeking a minor in biology to supplement and strengthen the major field of study.


## Expected Student Outcomes

- Students will develop a broad-based knowledge of concepts and terminology in molecular, cellular, organismal, and ecological biology.
- Students will develop a supporting knowledge of concepts and terminology in the related fields of mathematics, physics, and chemistry.
- Students will develop skills in reading and interpreting the scientific literature and in presenting a synthesis of it accurately in oral and written form.
- Students will demonstrate critical thinking and problem solving skills using experimental design and the scientific method.
- Students will evaluate the scientific validity of information and ideas.


## Outcomes Assessment Activities

Assessment of students' improvement in intellectual skills, knowledge and capacities from entrance to graduation will be accomplished through the use of several tools. Exams and course assignments will be used as one measure of the student's proficiency in writing skills, acquisition of knowledge, communication, problem solving and laboratory skills. All majors will take a Senior Seminar that requires scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty. Seniors will also take the Biology Major Field Test, which measures Colorado State University-Pueblo students' content knowledge and analytical skills against national norms.

## General Requirements

- Students majoring in biology must receive a grade of C or better (2.000) in all core biology courses.
- Students graduating with a BS in biology must have at least a cumulative GPA of 2.000 in the major area. A cumulative GPA of 2.600 in the major area is required for admission to the teacher education program.
- Transfer students are required to earn a minimum of 15 semester credit hours in approved Biology upper division courses from CSU-Pueblo, including BIOL 493 (Seminar), for graduation with a BS degree in Biology.
- Students majoring in biology must demonstrate computer literacy. This can be met by CIS 100, CIS 103 and CIS 104 courses.
- Graduates are encouraged to complete a minor outside the biology department.


## Core Requirements for the Biology Major

| BIOL | urses | Titles Credits |
| :---: | :---: | :---: |
| BIOL | 171 | Career Planning I.............................. 1 |
| BIOL | 181/L | College Biology I/Organismal Bio/Lab .. 4 |
| BIOL | 182/L | College Biology II/Cellular Bio/Lab ....... 4 |
| BIOL | 201/L | Botany/Lab OR |
| BIOL | 202/L | Zoology/Lab..................................... 4 |
| BIOL | 301/L | General Microbiology/Lab.................. 5 |
| BIOL | 350 | Mendelian \& Population Genetics........ 2 |
| BIOL | 351 | Molecular Biology and Genetics .......... 2 |
| BIOL | 352 | Evolutionary Biology and Ecology ....... 3 |
| BIOL | 412/L | Cellular Biology/Lab OR |
| BIOL | 413/L | Plant Physiology/Lab OR |
| BIOL | 414/L | Vertebrate Physiology/Lab ................. 4 |
| BIOL | 493 | Seminar .......................................... 1 |

TOTAL 30

## - Basic Biology Emphasis

Required Biology Core Courses .......................................... 30
Advisor-Approved Upper Division Biology
Electives........................................................................... 15

TOTAL 45

## Required Support Courses

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| CHEM | 121/L | General Chemistry I/Lab.. |  |
| CHEM | 122/L | General Chemistry II/Lab. |  |
| CHEM | 301/L | Organic Chemistry I/Lab |  |
| CHEM | 302/L | Organic Chemistry II/Lab |  |
| MATH | 156 | Introduction to Statistics. |  |
| MATH | 221 | Applied Calculus: An Intuitive Approach |  |
| PHYS | 201/L | Principles of Physics I/Lab AND |  |
| PHYS | 202/L | Principles of Physics II/Lab.... OR | $\text { ......... } 8$ |
| PHYS | 221/L | General Physics I/Lab AND |  |
| PHYS | 222/L | General Physics II/Lab.......... | ...... 10 |
| SPCOM | 103 | Speaking and Listening (H) ... | ....... 3 |
|  |  | TOTAL | L 38-40 |
| Institutional and General Education |  |  | ...... 21 |
| General Electives |  |  | ..14-16 |
| Total credit hours. |  |  |  |

## - Biomedical Sciences Emphasis

This emphasis includes pre-professional programs: Chiropractic, Dental, Medical, Occupational Therapy, Optometric, Pharmacy, Physical Therapy, Physician Assistant, Podiatric Medicine, and Veterinary Medicine.

See Basic Biology Emphasis above and consult with academic advisor for other requirements. Electives vary with professional area.

Students seeking to major in Nutrition can complete five terms of coursework at CSU-Pueblo. Articulation agreements are in place for transfer to undergraduate programs in Nutrition.

## - Environmental Biosciences Emphasis

This emphasis includes Pre-Ecology, Pre-Forestry and Wildlife, Environmental Health and Environmental Technology.

Basic Biology Emphasis above with these required electives:
BIOL Courses TitlesBiology Required Core with BIOL 201/L and 202/L......... 34
BIOL 453/L Ecology/Lab ..... 4
BIOL 462 Environmental Management ..... 3
Advisor approved Upper Division Biology Electives ..... 4
TOTAL 45
Consult with academic advisor for other requirements,which vary with emphasis.

- Cellular and Molecular Biosciences Emphasis
This emphasis includes Cellular \& Molecular,Bioinformatics, and Medical Technology. Also preparesstudents for careers in forensics. Consult with academicadvisor for specific requirements.
Cellular and Molecular
Basic Biology Emphasis with the following required courses:
Courses Titles Credits
Biology required core with BIOL 412/L ..... 30
BIOL 351L Advanced Genetics \& Molecular Biology Lab ..... 2
CHEM 311 Survey of Biochemistry ..... OR
CHEM 411 Biochemistry I ..... 3
Advisor approved Upper Division Biology Electives ..... 10
TOTAL 45
Bioinformatics
Courses Titles Credits
Biology required core with BIOL 412/L ..... 30
BIOL 351L Advanced Genetics \& Molecular Biology Lab ..... 2
CHEM 411 Biochemistry I ..... 3
BIOL 450/L Survey of Genomics and Bioinformatics/Lab ..... 3
Advisor approved Upper Division Biology Electives ..... 5
TOTAL ..... 43
Required Support Courses
Courses Titles Credits
CHEM 121/L General Chemistry I/Lab ..... 5
CHEM 122/L General Chemistry II/Lab ..... 5
CHEM 301/L Organic Chemistry I/Lab ..... 5

| CHEM | 302/L | Organic Chemistry II/Lab .................... 5 |
| :---: | :---: | :---: |
| CHEM | 412/L | Biochemistry II/Lab ............................ 5 |
| CIS | 171 | Introduction to Java Programming ........ 4 |
| MATH | 126 | Calculus \& Analytic Geometry I ........... 5 |
| MATH | 224 | Calculus \& Analytic Geometry II .......... 5 |
| MATH | 256 | Probability for Engineers \& Scientists ... 3 |
| MATH | 356 | Statistics for Engineers \& Scientists ..... 3 |
| PHYS | 201/L | Principles of Physics I/Lab AND |
| PHYS | 202/L | Principles of Physics II/Lab $\qquad$ OR |
| PHYS | 221/L | General Physics I/Lab AND |
| PHYS | 222/L | General Physics II/Lab...................... 10 |
| SPCOM 103 |  | Speaking and Listening (H) ................. 3 |
|  |  | TOTAL 56-58 |
| Institutional and General Education ............................ 21 |  |  |
| Total credit hours ...........................................120-122 |  |  |
| - Biology/Chemistry Double Major Emphasis |  |  |
| Courses |  | Titles Credits |
| Required Biology core with BIOL 493 orCHEM 493, Seminar .......................................... 30 |  |  |
|  |  |  |
| Advisor Approv |  | Biology electives ............................ 10 |
|  |  | TOTAL 40 |
| Required Support Courses |  |  |
| Courses |  | Titles Credits |
| MATH | 126 | Calculus \& Analytic Geometry I ........... 5 |
| MATH | 224 | Calculus \& Analytic Geometry II ........... 5 |
| PHYS | 201/L | Principles of Physics I/Lab AND |
| PHYS | 202/L | Principles of Physics II/Lab $\qquad$ OR |
| PHYS | 221/L | General Physics I/Lab AND |
| PHYS | 222/L | General Physics II/Lab...................... 10 |
| SPCOM | 103 | Speaking and Listening (H) ................ 3 |

TOTAL 21-23

## Chemistry Core

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| CHEM | 121/L | General Chemistry I/Lab |  |
| CHEM | 122/L | General Chemistry II/Lab. | 5 |
| CHEM | 221/L | Inorganic Chemistry/Lab |  |
| CHEM | 301/L | Organic Chemistry I/Lab |  |
| CHEM | 302/L | Organic Chemistry II/Lab |  |
| CHEM | 317/L | Quantitative Analysis/Lab |  |
| CHEM | 321 | Physical Chemistry I. |  |


| $\begin{aligned} & \text { CHEM } \\ & \text { CHEM } \end{aligned}$ | 322 | Physical Chemistry II ......................... 3 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 419/L | Instrumental Analysis/Lab . | ........... |  |
|  |  |  | TOTAL | 39 |
| Institutional and General Education ............................. 21 |  |  |  |  |
| Total credit hours...........................................121-123 |  |  |  |  |

- Biology Secondary Certification Emphasis
Courses Titles Credits

BIOL 181/L College Biology I/Organismal Bio/Lab .. 4
BIOL 182/L College Biology II/Cellular Bio/Lab ....... 4
BIOL 201/L Botany/Lab OR
BIOL 202/L Zoology/Lab......................................... 4
BIOL 350 Mendelian \& Population Genetics......... 2
BIOL 351 Molecular Biology and Genetics ........... 2
BIOL 206/L Intro to Microbiology/Lab OR
BIOL 301/L General Microbiology/Lab..................4-5
BIOL 223/L Human Physiology \& Anatomy I/Lab OR
BIOL 224/L Human Physiology \& Anatomy II/Lab OR
BIOL 414/L Vertebrate Physiology/Lab ................... 4
BIOL 352 Evolutionary Biology and Ecology ........ 3
BIOL 378 Laboratory in Teaching Biology ............ 1
Biology Upper Division Field Elective/Lab ....................3-4
Approved Biology Upper Division Elective/Lab ................. 3
BIOL 493 Seminar................................................ 1
CHEM 121/L General Chemistry I/Lab....................... 5
CHEM 122/L General Chemistry II/Lab...................... 5
CHEM 211/L Intro to Organic Chemistry/Lab
OR
CHEM 301/L Organic Chemistry I/Lab....................4-5
GEOL 101/L Earth Science/Lab ................................ 4
MATH 221 Applied Calculus: An Intuitive Approach .. 4
PHYS 201/L Principles of Physics I/Lab.................... 4
PHYS 202/L Principles of Physics II/Lab................... 4
TOTAL 65-68
Education Minor ............................................................... 34
Institutional and General Education to
include the following courses: ......................................... 24

| PSYCH 151 | Human Development <br> OR |
| :--- | :--- |
| PSYCH 251 | Childhood and Adolescence <br> SPCOM 103 |
| Speaking and Listening <br> (grade of B or better required) |  |

Total credit hours
123-126

## - Elementary Teaching

## See Liberal Studies with Science Emphasis

## Institutional and General Education

Please refer to the General Education Requirements in the Academic Policies section of this catalog or refer to your individual department's curriculum sheet.

## Specific Requirements for the Professional Biology Minor

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| BIOL | 181/L | College | o/Lab . |
| BIOL | 182/L | College | ab...... |
| Approve | d Biolo | Electiv |  |
| Approv | Upp | vision |  |

## TOTAL 20

## Specific Requirements for the General Biology Minor

Approved Lower-division Electives.................................. 12
Approved Upper-division Electives. .. 8

TOTAL 20

## Experiential Opportunities

There are many opportunities to participate in experiences that will complement and reinforce a student's academic experience. The activities may be either on- or off-campus and may be used to develop leadership and interpersonal skills. The faculty of the biology department actively encourages student participation in such activities.

## MASTERS DEGREE IN CHEMISTRY 3+2 PLAN (BS/MS)

A feature of the Chemistry MS program is the $3+2$ plan. This plan gives qualified undergraduate students the opportunity to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on individual student's abilities and motivation.

Students in the $3+2$ program are expected to successfully complete the requirements for both the BS and MS degree in five academic years. This is shorter than the typical six years that are necessary to complete BS and MS programs independently. Students must apply to the $3+2$
program during the Spring semester of their junior year or the Fall semester of their senior year and meet the course requirements listed below. Students applying to the 3+2 program must have a minimum 3.0 overall GPA and a minimum 3.25 GPA in their chemistry courses.

The application file for admission to the Chemistry MS 3+2 plan must include:

1. A completed Chemistry MS application form;
2. A CSU-Pueblo Transcript;
3. Two letters of recommendation from CSU-Pueblo faculty; and
4. Combined GRE scores above 300 (students may be admitted into the $3+2$ program before taking the GRE; however, they must submit satisfactory GRE scores by the last day of finals at the end of their first semester in the $3+2$ Chemistry MS program to remain in the program).

Prior to being admitted to the Chemistry MS 3+2 plan, students must have completed or be in the process of taking the following courses:

| Courses | Titles |  |
| :--- | :--- | :--- |
| CHEM | 121/L | General Chemistry I + Lab |
| CHEM | 122/L | General Chemistry II + Lab |
| CHEM | 301/L | Organic Chemistry I + Lab |
| CHEM | 302/L | Organic Chemistry II + Lab |
| CHEM | 221/L | Inorganic Chemistry + Lab |
|  |  | OR |
| CHEM | 421 | Advanced Inorganic Chemistry |
| PHYS | $221 /$ L | General Physics I + Lab |
| PHYS | $222 /$ L | General Physics II + Lab |
| MATH | 224 | Calculus \& Analytical Geometry II |

All other requirements, including core courses, for the 3+2 plan are the same as for the regular Chemistry MS program plan. Dual-listed courses taken by the $3+2$ plan students as 400 level courses may be acceptable as electives to meet the minimum program course load requirements with the permission of the specific course instructor and Chemistry MS Program Director. It is expected that students take any 400/500 level courses at the 500 level once they are enrolled in the $3+2$ program plan. Students admitted under the $3+2$ plan may chose either the thesis or non-thesis (internship) program option.

Additional information about the Chemistry MS program and its requirements is found in the Graduate Programs in Natural Sciences section listed in the Graduate Programs section of the catalog.

## MASTERS DEGREE IN BIOCHEMISTRY 3+2 PLAN (BS/MS)

A feature of the Biochemistry MS program is the $3+2$ plan. This plan gives qualified undergraduate students the opportunity to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on individual student's abilities and motivation.

Students in the 3+2 program are expected to successfully complete the requirements for both the BS and MS degree in five academic years. This is shorter than the typical six years that are necessary to complete BS and MS programs independently. Students must apply to the $3+2$ program during the Spring semester of their junior year or the Fall semester of their senior year and meet the course requirements listed below. Students applying to the 3+2 program must have a minimum 3.0 overall GPA and a minimum 3.25 GPA in their chemistry and biology courses.

The application file for admission to the Biochemistry MS $3+2$ plan must include:

1. A completed Biochemistry MS application form;
2. A CSU-Pueblo Transcript;
3. Two letters of recommendation from CSU-Pueblo faculty; and
4. Combined GRE scores above 300 (students may be admitted into the $3+2$ program before taking the GRE; however, they must submit satisfactory GRE scores by the last day of finals at the end of their first semester in the $3+2$ Biochemistry MS program to remain in the program).

Prior to being admitted to the Biochemistry MS $3+2$ plan, students must have completed or be in the process of taking the following courses:

| Course |  | Titles |
| :---: | :---: | :---: |
| CHEM | 121/L | General Chemistry I + Lab |
| CHEM | 122/L | General Chemistry II + Lab |
| CHEM | 301/L | Organic Chemistry I + Lab |
| CHEM | 302/L | Organic Chemistry II + Lab |
| BIOL | 301/L | General Microbiology + Lab |
| BOL | 351 | Molecular Biology and Genetics |
| MATH | 224 | Calculus \& Analytical Geometry II OR |
| MATH | 156 | Introduction to Statistics AND |
| PHYS | 202/L | Principles of Physics II + Lab OR |
| PHYS | 222/L | General Physics II + Lab |

All other requirements, including core courses, for the 3+2 plan are the same as for the regular Biochemistry MS
program plan. Dual-listed courses taken by the $3+2$ plan students as 400 level courses may be acceptable as electives to meet the minimum program course load requirements with the permission of the specific course instructor and Biochemistry MS Program Director. It is expected that students take any 400/500 level courses at the 500 level once they are enrolled in the $3+2$ program plan.

Additional information about the Biochemistry MS program and its requirements is found in the Graduate Programs in Natural Sciences section listed in the Graduate Programs in Natural Sciences section listed in the Graduate Programs section of the catalog.

## CHEMISTRY DEPARTMENT

## Department Chair: David Lehmpuhl

Faculty: Bonetti, Cranswick, Dillon, Druelinger, Farrer, Kinney

The major in chemistry leads to a Bachelor of Science (BS) Degree and the chemistry curriculum is certified by the American Chemical Society.

The chemistry department strives to provide intellectual and professional training for students in the field of chemistry and in support of the American Chemical Society charter "to encourage in the broadest and most liberal manner the advancement of chemistry in all its branches; the promotion of research in chemical science and industry, the improvement of the qualifications and usefulness of chemists through high standards of education to promote scientific interests and inquiry."

Chemistry is a foundation science for many professions. Graduates with degrees in chemistry find employment in such diverse areas as biotechnology, health sciences, forensic science, agricultural and environmental fields, transportation industries, the semi-conductor industry, teaching and research.

Consequently, the chemistry department provides students with a number of diverse programs to assure each student versatility and a sound education in the fundamental areas of modern chemistry.

In addition to curricula for students who wish to pursue chemistry as a profession, programs can be designed for pre-professional areas including pre-pharmacy, premedicine, pre-dentistry and pre-veterinary medicine.

A core curriculum for the major exists and many emphasis areas are open to students to combine other interests with a major in chemistry. For example, while medical schools do not mandate any particular major for entering students,
biology and chemistry have been the leading majors of students entering medical school. The requirements for a pre-medicine/chemistry major are the same as for the chemistry major emphasis.

Additionally, the student must complete specific courses required by the medical schools to which they are applying. It is recommended that pre-medical and other pre-professional students coordinate the program with the appropriate pre-professional advisor, as well as the chemistry advisor, to assure that specific course requirements are completed.

## Program Goals

- To prepare graduates in the discipline of chemistry to become productive members of the profession whether they go on to industry, post-graduate education or other areas.
- To prepare students in the verbal, written and quantitative skills that are prerequisites to advanced study or careers in chemistry.
- To prepare students in the theoretical principals of chemistry as well as in the laboratory approach to problem solving.
- To maintain approval of the chemistry curriculum as defined by the American Chemical Society, Committee on Professional Training.
- To provide the opportunity for a variety of educational programs through the following:

1) Basic Chemistry
2) ACS Certified Curriculum
3) Biochemistry
4) Chemistry/Teacher Certification
5) Double Major
6) Chemistry Minor

## Expected Student Outcomes

Chemistry graduates are expected to:

- Understand the concept of and be able to apply the scientific method to problem solution;
- Understand classifications of chemical compounds, general reaction types and quantitative aspects of stoichiometry as applied to chemical reactions;
- Apply basic knowledge of related fields such as mathematics and physics to problem solving, methods of analysis and use of numerical data in the chemical sciences;
- Demonstrate a knowledge of basic laboratory skills, methods and equipment used in chemistry for observation and analysis of chemical systems;
- Read, think and write critically and review current literature in the chemical sciences; and
- Exhibit a comprehensive knowledge of the fundamental theories, concepts and skills necessary in the chemical sciences.


## General Requirements

- Students majoring or minoring in chemistry are required to have a cumulative GPA of 2.000 or better in their chemistry courses. In addition, students majoring or minoring in chemistry must receive a grade of " $C$ " or better in all core chemistry courses.
- Proficiency in physics, math and computer science is essential for understanding and applying chemical principles; therefore, graduates must complete approved math and physics courses with an overall GPA of 2.000 or better.
- The ability to think across disciplines contributes significantly to the educational experience as well as the application of chemistry as a profession; therefore, graduates must successfully complete an approved minor or area of concentration such that the designated minor or area of concentration GPA is 2.000 or better.
- Transfer students are required to earn a minimum of 20 semester credit hours in approved chemistry courses from CSU-Pueblo for graduation with a BS degree in chemistry. Transfer students wishing to minor in chemistry must earn a minimum of 10 of the 20 credit hours required at CSU-Pueblo.
- Students will be required to successfully complete American Chemical Society exams in general chemistry, organic chemistry, analytical chemistry, physical chemistry and instrumental methods during the course of the chemistry degree curriculum.
- Students will be required to take an exit examination during the senior year, covering the undergraduate chemistry curriculum. An exit interview is also required.


## Specific Requirements

The following common core is required for all of the chemistry emphasis areas for the Bachelor of Science Degree:

CHEM Courses Titles
Credits
CHEM 121/L General Chemistry I/Lab....................... 5
CHEM 122/L General Chemistry II/Lab...................... 5
CHEM 221/L Inorganic Chemistry/Lab........................ 3
CHEM 301/L Organic Chemistry I/Lab ...................... 5
CHEM 302/L Organic Chemistry II/Lab...................... 5
CHEM 317/L Quantitative Analysis/Lab ..................... 5
CHEM 321* Physical Chemistry I............................. 3
CHEM 322* Physical Chemistry II............................. 3
CHEM 419/L Instrumental Analysis/Lab .................... 5
CHEM 493 Seminar................................................ 1

- CHEM 322 is not a continuation of CHEM 321 and can be taken before CHEM 321 .
All emphasis areas for the chemistry major also require completion of the following institutional and general education requirements.


## Institutional and General Education

Please refer to the General Education Requirements in the Academic Policies section of this catalog or refer to your individual department's curriculum sheet.

## Requirements for the Specific Emphasis Areas

## - Basic Chemistry Emphasis

| Courses Titles | Credits |
| :--- | :--- |
| Required Chemistry Core....................................... 40 |  |40

Requird
Requird
CHEM 323 Experimental Physical Chemistry ..... 2
Approved Elective (CHEM or MATH 156) ..... 3
TOTAL 45
Other Required Courses
Courses Titles Credits
MATH 126 Calculus \& Analytic Geometry I ..... 5
MATH 224 Calculus \& Analytic Geometry II ..... 5
PHYS 221/L General Physics I/Lab ..... 5
PHYS 222/L General Physics II/Lab ..... 5
TOTA ..... 0
Institutional and General Education Courses ..... 24
Approved Minor ..... 20
Free Electives ..... 11
TOTAL ..... 55
Total credit hours ..... 120

- ACS Certified Emphasis
Courses Titles Credits
Required Chemistry Core ..... 40
CHEM 323 Experimental Physical Chemistry .....  2
CHEM 411 Biochemistry I ..... 3
CHEM 421 Advanced Inorganic Chemistry ..... 3
CHEM 492 Research .....  1
Approved Chemistry Electives ..... 6
TOTAL 55


## Other Required Courses

Courses Titles Credits
MATH 126 Calculus \& Analytic Geometry I ..... 5
MATH 224 Calculus \& Analytic Geometry II ..... 5
PHYS 221/L General Physics I/Lab ..... 5
PHYS 222/L General Physics II/Lab ..... 5
TOTAL ..... 20
Institutional and General Education ..... 24
Free Electives ..... 1
Approved Minor ..... 20
TOTAL ..... 45
Total credit hours ..... 120

- Biochemistry Emphasis
Courses TitlesRequired Chemistry Core40
CHEM 411 Biochemistry I ..... 3
CHEM 412/L Biochemistry II/Lab ..... 5
Approved CHEM Elective. ..... 3
(CHEM 492 or 495 strongly suggested)
TOTAL 51
Other Required Courses

| Cour |  | Titles Credits |
| :---: | :---: | :---: |
| BIOL | 181/L | College Biology I/Organismal Bio/Lab .. 4 |
| BIOL | 182/L | College Biology II/Cellular Bio/Lab ...... 4 |
| BIOL | 301/L | General Microbiology/Lab................... 5 |
| BIOL | 350 | Mendelian and Population Genetics .... 2 |
| BIOL | 351/L | Molecular Biology and Genetics/Lab .... 4 |
| BIOL | 412/L | Cellular Biology/Lab.......................... 4 |
| MATH | 126 | Calculus \& Analytic Geometry I ........... 5 |
| MATH | 224 | Calculus \& Analytic Geometry II .......... 5 |
| PHYS | 221/L | General Physics I/Lab ...................... 5 |
| PHYS | 222/L | General Physics II/Lab ...................... 5 |

TOTAL ..... 43
Institutional and General Education ..... 24
Free Electives ..... 2
Total credit hours ..... 120

- Double Major Emphasis
Required Chemistry Core ..... 40(Including either major seminar course)
Other Required Courses

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| MATH | 126 | Calculus \& Analytic Geometry | ....... 5 |
| MATH | 224 | Calculus \& Analytic Geometry | ....... 5 |
| PHYS | 201/L | Principles of Physics I/Lab..... OR | $.4$ |
| PHYS | 221/L | General Physics I/Lab |  |
| PHYS | 202/L | Principles of Physics II/Lab... OR | $\text { ..... } 4$ |
| PHYS | 222/L | General Physics II/Lab.... | .... 5 |

TOTAL 18-20
Institutional and General Education ..... 24
Approved Second Major Minimum ..... 39
TOTAL 63
Total credit hours121-123

- Secondary Teaching Certification Emphasis
Required Chemistry Courses
Courses Titles Credits
CHEM 121/L General Chemistry I/Lab....................... 5
CHEM 122/L General Chemistry II/Lab ..... 5
CHEM 211/L Intro to Organic Chemistry/Lab ..... 4
OR
CHEM 301/L Organic Chemistry I/Lab ..... 5
CHEM 311 Survey of Biochemistry ..... 3
CHEM 317/L Quantitative Analysis/Lab ..... 5
CHEM 321 Physical Chemistry I ..... 3
CHEM 419/L Instrumental Analysis/Lab ..... 5
OR
CHEM 221/L Inorganic Chemistry/Lab ..... 3
CHEM 493 Seminar ..... 1
TOTAL 29-32
Other Required Courses

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | ---: |
| BIOL | 100/L | Principles of Biology /Lab ................... 4 |  |
| BIOL | 121/L | Environmental Conservation/Lab......... 4 |  |
| GEOL | $101 / \mathrm{L}$ | Earth Science/Lab .............................. 4 |  |
| MATH | 126 | Calculus \& Analytic Geometry I .......... 5 |  |
| MATH | 224 | Calculus \& Analytic Geometry II .......... 5 |  |
| PHYS | $221 /$ L | General Physics I/Lab......................... 5 |  |
| PHYS | $222 / \mathrm{L}$ | General Physics II/Lab....................... 5 |  |
| PSYCH 151 | Human Development....................... 3 |  |  |
|  |  | OR |  |
| PSYCH 251 | Childhood and Adolescence ................ 3 |  |  |
|  |  | OR |  |
| PSYCH 342 | Educational Psychology........................ 3 |  |  |
| ED | 202 | Foundation of Education..................... 3 |  |


| ED | 280 | Educational Media \&Technology ............ 3 |
| :--- | :--- | :--- |
| ED | 301 | Frameworks of Teaching ................. 3 |
| ED | 412 | Teaching Diverse Learners .............. 3 |

## - Pre-Professional

Students ultimately seeking professional degrees such as Pharmacy, PharmD, MD, DVM, DO, DDS, and DC, may opt to complete a bachelors, or minor, in chemistry as preparation for future professional studies. A solid understanding of the chemistry and analysis of biomolecules, pharmaceuticals, etc. serves as an excellent foundation for professional programs in the health sciences. Selection of the Biochemistry or Double Major Emphasis is recommended for pre-professional students completing the BS in chemistry. Pre-professional students must work closely with academic advisors to ensure completion of specific curricular requirements needed for admission into specific professional programs.

- Chemistry Minor

Courses Titles Credits
CHEM 121/L General Chemistry I/Lab....................... 5
CHEM 122/L General Chemistry II/Lab...................... 5
Upper-division Electives.................................................. 10
$\overline{\text { TOTAL } 20}$

## Co-curricular Requirements

Students should experience co-curricular activities which enhance, broaden and reinforce the academic experience; therefore, the faculty support and encourage students to participate in science-related, as well as in general activities such as:

1) Science or chemistry clubs
2) Student government
3) Scientific meetings, seminars, symposia, field trips, tours, etc.
4) Internships
5) Research

## Outcomes Assessment Activities

- Assessment of chemistry majors occurs through examination of GPA in required courses. Majors are required to maintain a 2.000 GPA in major and minor courses as well as in other required courses.
- Students are required to complete American Chemical Society national standard exams when given during the course of the chemistry degree curriculum. Scores are compared to national averages to determine if students exhibit a comprehensive knowledge of the fundamental theories and concepts necessary in the chemical sciences disciplinary areas.
- Students are required to take an exit examination during the senior year. The ETS Major Field Examination covers the undergraduate chemistry curriculum. Scores are compared to national averages to determine if students exhibit a comprehensive knowledge of the fundamental theories and concepts necessary in the chemical sciences overall.


## MATHEMATICS AND PHYSICS DEPARTMENT

Department Chair: Frank Zizza

## MATHEMATICS PROGRAM

Faculty: Barnett, Chacon, Funk-Neubauer, Kreminski, Louisell, Lundberg, Melnykov, Nichols, Poritz, Zizza

The program's mission is to foster students' development in quantitative and analytical reasoning skills, powerful mathematical problem-solving strategies, effective techniques for the communication of results and the capacity for lifelong independent learning. The major in mathematics leads to either a Bachelor of Arts (BA) or a Bachelor of Science (BS) degree. The program's flexible curriculum prepares students for diverse professional careers and for graduate studies. Faculty advisors work directly with majors and minors to design individual programs of study. Students who are potential majors or minors should consult with a faculty advisor as early as possible. Appointments with a faculty advisor can be made anytime by calling the department office.

## Program Goals

- Educate students to effectively use quantitative and analytical methods and the language of mathematics.
- Prepare students for professional careers and graduate studies in areas requiring advanced analytical skills, including actuarial science, computer science, engineering, operations research, biomathematics, cryptography, finance, pure and applied mathematics and teaching.
- Promote a scholarly attitude of mind that enables students to effectively use mathematics with the ability to think critically, synthesize their knowledge and move to higher levels of independent thinking.


## Expected Student Outcomes

Upon successful completion of the mathematics major, students will:

- Learn, understand and apply mathematics from the core mathematical disciplines of calculus, abstract algebra, analysis, modeling, differential equations, geometry, probability, and statistics.
- Formulate and solve problems using mathematical tools, while working alone or in groups on routine problems, non-routine and open-ended problems, problems involving applications to other fields, problems involving real-world data, and abstract problems within mathematics.
- Create, analyze and apply mathematical abstraction to real problems by understanding and producing formal mathematical arguments with an appreciation for the mathematical standards of rigor, elegance, and beauty.
- Learn independently, locate and use appropriate sources of technical material, and make use of modern computational tools.
- Produce convincing, precise verbal and written communications of technical material.


## General Requirements

- All mathematics majors must complete the mathematics core curriculum: MATH 126, 207, 224, $307,325,350,421$, and 427. Majors are expected to complete core courses numbered above MATH 325 at CSU-Pueblo.
- All majors must complete a physics course numbered 200 or above.
- Mathematics majors and minors must complete the mathematics courses in their program with grades of C or better.
- MATH 337 is a required elective for all mathematics majors not pursuing secondary education endorsement.
- All majors are required to complete an approved twoterm sequence in a laboratory science (CHEM 121/121L and 122/122L, or PHYS 221/221L and 222/222L).
- Mathematics majors must demonstrate proficiency in "an approved" computer language. It is strongly recommended that students complete this requirement within the first 60 credit hours.


## Institutional and General Education

Please refer to the General Education Requirements in the Academic Policies section of this catalog or refer to the individual department's curriculum sheet.
Specific Requirements for the Mathematics Major
$\begin{array}{lll}\text { MATH } & 126 & \text { Calculus \& Analytic Geometry I }\end{array}$ ..... Credits
MATH $207 \quad \begin{array}{ll}\text { Matrix \& Vec } \\ & \text { Applications }\end{array}$ ..... 2
MATH 224 Calculus \& Analytic Geometry II ..... 5
MATH 307 Intro to Linear Algebra ..... 4
MATH 325 Intermediate Calculus ..... 3
MATH 337 Differential Equations I ..... 3
MATH 350 Probability ..... 3
MATH 421 Introduction to Analysis ..... 4
MATH 427 Abstract Algebra .....
(Excluding MATH 360, 361, 477)
TOTAL 39
Other Requirements
Laboratory Science Sequence ..... 10
Computer Programming ..... 4
TOTAL 14
General Education credits ..... 24
Electives ..... 43
Total credit hours ..... 120
Specific Requirements for the Mathematics Major/ Secondary Certification

| MATH Courses |  | Titles Credits |
| :---: | :---: | :---: |
| MATH | 126 | Calculus \& Analytic Geometry I ........... 5 |
| MATH | 207 | Matrix \& Vector Algebra with |
|  |  | Applications ..................................... 2 |
| MATH | 224 | Calculus \& Analytic Geometry II .......... 5 |
| MATH | 307 | Intro to Linear Algebra ....................... 4 |
| MATH | 319 | Number Theory................................ 3 |
| MATH | 325 | Intermediate Calculus ........................ 3 |
| MATH | 330 | Intro to Higher Geometry .................... 3 |
| MATH | 350 | Probability........................................ 3 |
| MATH | 356 | Statistics for Engineers \& Scientists ..... 3 |
| MATH | 421 | Introduction to Analysis...................... 4 |

MATH 427 Abstract Algebra ..... 4
MATH 463 History of Mathematics ..... 3
MATH 477 Materials \& Techniques of TeachingSecondary School Math4
TOTAL 4
Other Requirements

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| ED | 202 | Foundations of Education .................. 3 |
| ED | 280 | Educational Media and Technology ..... 3 |
| ED | 301 | Frameworks of Teaching .................... 3 |
| ED | 412 | Teaching Diverse Learners ................ 3 |
| ED | 485 | Capstone Seminar in Education .......... 2 |
| ED | 488 | Secondary Student Teaching ............ 12 |
| PSYCH | 151 | Human Development......................... 3 |
|  |  | OR |
| PSYCH | 251 | Childhood and Adolescence ................ 3 |
|  |  | OR |
| PSYCH | 342 | Educational Psychology ..................... 3 |
| RDG | 435 | Content Area Literacy........................ 4 |

TOTAL ..... 33
Laboratory Science Sequence ..... 10
Computer Programming ..... 4
Electives ..... 6
TOTAL ..... 20
General Education ..... 21
Total credit hours ..... 120
Specific Requirements for the Minor in Mathematics
Courses Titles Credits
MATH 126 Calculus \& Analytic Geometry I.............. 5
MATH 224 Calculus \& Analytic Geometry II ..... 5
(Excluding MATH 360, 361, 362 \& 477) ..... 10
TOTAL ..... 20* Two of these must be taken at CSU-Pueblo.
Specific Requirements for the Minor in Computational Mathematics

| Courses |  | Titles | Credits |
| :--- | :---: | :--- | ---: |
| MATH | 126 | Calculus \& Analytic Geometry I ............ 5 |  |
| MATH | 207 | Matrix \& Vector Algebra with |  |
|  |  | Applications ........................................ 2 |  |
| MATH | 224 | Calculus \& Analytic Geometry II ......... 5 |  |


| MATH | 307 | Introduction to Linear Algebra $\qquad$ 4 OR |
| :---: | :---: | :---: |
| MATH | 342 | Introduction to Numerical Analysis....... 3 |
| MATH | 320 | Introductory Discrete Mathematics ....... 3 |
| MATH | 345 | Algorithms \& Data Structures .............. 4 |
|  |  | TOTAL 22-23 |
| Requirements for the Computational Mathematics Minor specific to Math Majors |  |  |
| Math majors, in lieu of the first 12 hours above are required to take: |  |  |
| Courses |  | Titles Credits |
| An approved programming elective............................... 3 |  |  |
| CIS | 171 | Intro to Java Programming ................. 4 |
| MATH | 242 | Intro to Computation with MATLAB...... 4 |
|  |  | TOTAL 11 |
| Specific Requirements for the Math/Physics Double |  |  |
| Major |  |  |
| MATH Courses |  | Titles Credits |
| MATH | 126 | Calculus \& Analytic Geometry I ........... 5 |
| MATH | 207 | Matrix \& Vector Algebra with Applications $\qquad$ . 2 |
| MATH | 224 | Calculus \& Analytic Geometry II .......... 5 |
| MATH | 307 | Intro to Linear Algebra ........................ 4 |
| MATH | 325 | Intermediate Calculus ........................ 3 |
| MATH | 337 | Differential Equations I....................... 3 |
| MATH | 338 | Differential Equations II...................... 3 |
| MATH | 350 | Probability AND |
| MATH | 356 | Stats for Engineers \& Scientists ........... 6 OR |
| MATH | 550 | Statistical Methods............................. 3 |
| MATH | 421 | Introduction to Analysis...................... 4 |
| MATH | 427 | Abstract Algebra ............................... 4 |

## TOTAL 36-39

PHYS Courses TitlesPHYS 221/L General Physics I/Lab......................... 5
PHYS 222/L General Physics II/Lab5
PHYS 301 Theoretical Mechanics ..... 4
PHYS 323/L General Physics III/Lab ..... 5
PHYS 321/322 Thermodynamics/Lab ..... 4
PHYS 431/432 Electricity and Magnetism/Lab ..... 5
PHYS 441 Quantum Mechanics ..... 4
PHYS 480 Practicum in Lab Instruction .....
PHYS 493 Seminar ..... 1

## Other Requirements

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| MATH | 425 | Complex Variables.. | ...... 3 |
|  |  | OR |  |
| PHYS | 341/342 | Optics/Adv. Laboratory-Optics | ........ 4 |
| PHYS | 492 | Research |  |
|  |  | OR |  |
| MATH | 492 | Research | ..... 1 |
| CHEM | 121/L | General Chemistry I/Lab.. | ..... 5 |
| CHEM | 122/L | General Chemistry II/Lab ... | .... 5 |
| Comput | er Progra | ming..... | .... 3 |

## TOTAL 17-18

General Education ..... 24
Electives ..... 5-6
Total credit hours ..... 120

## Co-Curricular Requirements

Students have the opportunity to broaden and reinforce the academic experience through participation in a variety of co-curricular activities. All students are encouraged to join the CSU-Pueblo Math Club. Many students serve as tutors in the Math Learning Center.

## Outcomes Assessment Activities

- Faculty advisors meet individually with students on a regular basis to help with schedule planning and to discuss the student's progress toward educational and career goals. Advisors maintain a record of each student's performance in his/her program of study.
- During the senior year, each major takes the Mathematics Field Achievement Test. This test measures a student's achievement level in comparison with students throughout the country.


## PHYSICS/PHYSICAL SCIENCE PROGRAM

Department Chair: Frank Zizza

Faculty: Brown, Wallin

The major in physics leads to a Bachelor of Science (BS) Degree. In addition, supporting courses and general education courses in physics and astronomy are available for students with a wide spectrum of interests, backgrounds and needs. Physics majors must consult with a program advisor as early as possible and must file a departmentally approved plan of study by the beginning of the junior year.

## The Bachelor of Science Degree in physics is offered with several emphasis areas:

For the first three (non-teacher) emphasis areas, the recommended sequences of courses presume that the student is ready to begin MATH 126 in the first term of the freshman year. If not, MATH 124 should be taken in the fall and MATH 126 in the spring of the freshman year concurrently with PHYS 221. Otherwise it may not be possible to complete the requirements for a physics degree within four years. Students, especially transfers, who do not strictly adhere to the plan of study, may find that the term of attendance at CSU-Pueblo will be extended beyond four years.

## Physics Emphasis

Primarily for students planning graduate study toward a professional career in physics, astronomy or other related fields.

## Engineering Emphasis

This emphasis is for students planning to enter positions in industry upon graduation. Courses in engineering enhance the utility of the graduate to potential employers.

## Chemical Physics or/Biophysics Emphasis

These emphasis areas are designed to meet specific career objectives for an individual.

## Physics/Secondary Certification Emphasis

This emphasis provides students with the knowledge and skills necessary to obtain Colorado Department of Education certification as science teachers with an emphasis in physics.

## Physical Science Secondary Certification Emphasis

This emphasis provides students with the knowledge and skills necessary to obtain Colorado Department of Education certification as science teachers with an emphasis in physics and chemistry.

## Physics/Math Double Major

See Math Program for details.

## MINORS

Minors also are available in physics and physical science for students who need a specialized science minor in these fields.

## Program Goals

- To supply students with the necessary background to successfully pursue graduate study towards a professional career in physics, astronomy or a related field.
- To prepare students upon graduation to enter technical positions in government or industry.
- To provide students with the knowledge and skills necessary to obtain Colorado Department of Education Certification as science teachers of physics or physical science.


## Expected Student Outcomes

Upon successful completion of the physics major, students will be able to:

- Think critically and logically and use the scientific method in their future investigations.
- Understand and apply knowledge of various subfields of physics at the undergraduate level and make a successful transition to technical fields, including engineering, teaching, business, and graduate studies.
- Effectively communicate their results orally and in writing.
- Learn independently, locate and use appropriate sources of technical material and make use of modern scientific and computational tools.


## General Requirements

- Students graduating with a BS in physics must have at least a 2.000 grade-point average in physics courses and no more than four credits in physics with grades of $D$.
- Students graduating with a minor in physics must have at least a 2.000 grade-point average in physics.
- A 2.500 grade-point average in the major area is required for admission to the teacher education program.
- At least 12 physics credits applied to the major (seven for minor) must be earned at CSU-Pueblo with a C or better average.
- Students must have earned a C or better grade in lower-division prerequisite courses before being admitted to upper-division courses in physics.
- In all but the teaching emphasis areas, students must demonstrate knowledge of computer programming.
- In all but the teaching emphasis areas, majors are required to take the senior research course, in which students become involved in a theoretical or experimental research problem relating to physics under the supervision of a department faculty member.
- A fundamental understanding of chemistry and its lab techniques is required of all majors.


## Institutional and General Education

Please refer to the General Education Requirements in the Academic Policies section of this catalog or refer to your individual department's curriculum sheet.

## Specific Requirements for the Physics Emphasis

| PHYS Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| PHYS | 221/L | General Physics I/Lab. | 5 |
| PHYS | 222/L | General Physics II/Lab. |  |
| PHYS | 301 | Theoretical Mechanics. | 4 |
| PHYS | 321 | Thermodynamics | 3 |
| PHYS | 322 | Advanced Laboratory - Heat. |  |
| PHYS | 323/L | General Physics III/Lab. |  |
| PHYS | 341 | Optics ... |  |
| PHYS | 342 | Advanced Laboratory - Optics . | ... 1 |
| PHYS | 431 | Electricity and Magnetism. |  |
| PHYS | 432 | Adv Lab Electricity \& Magnetism | ... 1 |
| PHYS | 441 | Quantum Mechanics... | . 4 |
| PHYS | 480 | Practicum in Lab Instruction .. | .... 1 |
| PHYS | 492 | Research | .. 1 |
| PHYS | 493 | Seminar |  |
| PHYS | 499 | Thesis Research.. | .. 1 |

## Other Required Courses

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| CHEM | 121/L | General Chemistry I/Lab........................ 5 |
| CHEM | $122 / \mathrm{L}$ | General Chemistry II/Lab................. 5 |
| MATH | 242 | MATLAB Programming.................... 4 |
|  |  | OR |
| EN | 103 | Problem Solving for Engineers .............. 3 |
| MATH | 126 | Calculus \& Analytic Geometry I ......... 5 |
| MATH | 207 | Matrix \& Vector Algebra with |
|  |  | Applications ......................................... 2 |

MATH 224 Calculus \& Analytic Geometry II ..... 5
MATH 325 Intermediate Calculus ..... 3
MATH 337 Differential Equations I ..... 3
MATH 338 Differential Equations II ..... 3
Approved Math Elective ..... 3-4
TOTAL 37-39
General Education ..... 24
Electives ..... 17-19
Total credit hours ..... 120

## Specific Requirements for the Engineering Emphasis

PHYS Courses TitlesPHYS 221/L General Physics I/Lab5
PHYS 222/L General Physics II/Lab ..... 5
PHYS 301 Theoretical Mechanics ..... 4
PHYS 321 Thermodynamics ..... 3
PHYS 322 Advanced Laboratory- Heat ..... 1
PHYS 323/L General Physics III/Lab ..... 5
PHYS 341 Optics ..... 3
PHYS 342 Advanced Laboratory - Optics ..... 1
PHYS 431 Electricity and Magnetism ..... 4
PHYS 492 Research ..... 1
TOTAL ..... 32
Other Required Courses
Courses TitlesCHEM 121/L General Chemistry I/Lab5
CHEM 122/L General Chemistry II/Lab ..... 5
EN 101 Introduction to Engineering ..... 2
EN 103 Problem Solving for Engineers ..... 3
EN 107 Engineering Graphics ..... 2
EN 211 Engineering Mechanics I ..... 3
EN 212 Engineering Mechanics II ..... 3
EN 231/L Circuit Analysis I/Lab ..... 5
EN 321 Thermodynamics ..... 3
EN
EN 441/L Engineering of ManufacturingProcesses/Lab4
EN 443 Quality Control and Reliability. ..... 3
EN 471 Operations Research ..... 3
MATH 126 Calculus \& Analytic Geometry I ..... 5
MATH 207 Matrix \& Vector Algebra with Applications ..... 2
MATH 224 Calculus \& Analytic Geometry II ..... 5
MATH 325 Intermediate Calculus ..... 3
MATH 337 Differential Equations I ..... 3
TOTAL ..... 63
General Education ..... 24
Electives. ..... 1
Total credit hours ..... 120
Specific Requirements for the Biophysics, or Chemical Physics Emphasis
PHYS Courses TitlesPHYS 221/L General Physics I/Lab5
PHYS 222/L General Physics II/Lab ..... 5
PHYS 301 Theoretical Mechanics ..... 4
PHYS 321 Thermodynamics ..... 3
PHYS 322 Advanced Laboratory- Heat ..... 1
PHYS 323/L General Physics III/Lab ..... 5

| PHYS | $341 / 342$ | 2 Optics/Adv. Laboratory-Optics .............. 4 OR |
| :---: | :---: | :---: |
| PHYS | 431 | Electricity and Magnetism................... 4 |
| PHYS | 441 | Quantum Mechanics.......................... 4 |
| PHYS | 492 | Research ......................................... 1 |
|  |  | TOTAL 32 |
| Other Required Courses |  |  |
| Courses |  | Titles Credits |
| CHEM | 121/L G | General Chemistry I/Lab...................... 5 |
| CHEM | 122/L | General Chemistry II/Lab..................... 5 |
| MATH | 242 M | MATLAB Programming. $\qquad$ OR |
| EN | 103 P | Problem Solving for Engineers .............. 3 |
| MATH | 126 C | Calculus \& Analytic Geometry I............. 5 |
| MATH | 207 M | Matrix \& Vector Algebra with <br> Applications $\qquad$ .2 |
| MATH | 224 C | Calculus \& Analytic Geometry II ............ 5 |
| MATH | 325 In | Intermediate Calculus .......................... 3 |
| MATH | 337 D | Differential Equations I ........................ 3 |
| Approved electives in biology $\qquad$ OR |  |  |
|  |  |  |
| Approved elective |  | es in chemistry ................................. 22 |
|  |  | TOTAL 53-64 |
| General Education.................................................... 24 |  |  |
| Electives ...............................................................11-0 |  |  |
| Total credit hours .................................................. 120 |  |  |
| *A MATH/PHYSICS double major is also available in the department. (See MATH department requirements.) |  |  |
| Specific Requirements for the Physics Secondary Certification Emphasis |  |  |
| PHYS Courses |  | Titles Credits |
| PHYS | 110 | Astronomy..................................... 3 |
| PHYS | 140/L | Light, Energy and the Atom/Lab....... 4 |
| PHYS | 221/L | General Physics I/Lab .................... 5 |
| PHYS | 222/L | General Physics II/Lab ................... 5 |
| PHYS | 321/322 | 2 Thermodynamics/Lab..................... 4 |
| PHYS | 323/L | General Physics III/Lab ................... 5 |
| PHYS | 341/342 | 2 Optics/Adv. Laboratory-Optics ......... 4 |
| PHYS | 480 | Practicum in Lab Instruction............ 1 |

TOTAL 31

## Other Required Courses

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| BIOL | 100/L | Principles of Biology/Lab ...................... 4 |
| BIOL | 121/L | Environmental Conservation/Lab........ 4 |
| CHEM | 121/L | General Chemistry I/Lab................... 5 |

CHEM 122/L General Chemistry II/Lab ..... 5
ED 202 Foundation of Education ..... 3
ED 280 Educational Media \& Technology ..... 3
ED 301 Frameworks of Teaching ..... 3
ED 412 Teaching Diverse Learners ..... 3
ED 444 Teaching Secondary Science ..... 4
ED 485 Capstone Seminar in Education ..... 2
ED 488 Student Teaching Secondary ..... 12
GEOL 101/L Earth Science/Lab ..... 4
MATH 126 Calculus \& Analytic Geometry I ..... 5
MATH 224 Calculus \& Analytic Geometry II ..... 5
PSYCH 151 Human Development ..... 3
OR
PSYCH 251 Childhood and Adolescence. ..... 3
OR
PSYCH 342 Educational Psychology .....  3
RDG 435 Content Area Literacy. ..... 4
TOTAL ..... 69
General Education ..... 21
Total credit hours ..... 121
Specific Requirements for the Physical Science Secondary Certification Emphasis
PHYS Courses Titles ..... Credits
PHYS 110 Astronomy ..... 3
PHYS 140/L Light, Energy and the Atom/Lab ..... 4
PHYS 221/L General Physics I/Lab ..... 5
PHYS 222/L General Physics II/Lab ..... 5
PHYS 323/L General Physics III/Lab ..... 5
TOTAL 22
CHEM Courses Titles
CHEM 121/L General Chemistry I/Lab ..... 5
CHEM 122/L General Chemistry II/Lab ..... 5
CHEM 211/L Intro to Organic Chemistry/Lab ..... 4
OR
CHEM 301/L Organic Chemistry I/Lab ..... 4
CHEM 317/L Quantitative Analysis/Lab ..... 5
CHEM 321 Physical Chemistry I .....  3
CHEM 378 Practicum in Lab Instruction ..... 1
TOTAL ..... 23
Other Required Courses

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | ---: |
| BIOL | 100/L | Principles of Biology/Lab .................... 4 |  |
| BIOL | $121 / \mathrm{L}$ | Environmental Conservation/Lab........ 4 |  |
| ED | 202 | Foundations of Education.................... 3 |  |
| ED | 280 | Educational Media \& Technology ........ 3 |  |
| ED | 301 | Frameworks of Teaching .................. 3 |  |
| ED | 412 | Teaching Diverse Learners ................ 3 |  |


| ED | 444 | Teaching Secondary Science ................ 4 |
| :--- | :--- | :--- |
| ED | 485 | Capstone Seminar in Education ......... 2 |
| ED | 488 | Student Teaching Secondary ........... 12 |

## Specific Requirements for the Minor in Physics

## PHYS Courses Titles <br> Credits

PHYS 221/L General Physics I/Lab............................ 5
PHYS 222/L General Physics II/Lab.......................... 5
PHYS 323/L General Physics III/Lab.......................... 5
Approved Upper-division Electives in Physics.................... 5

TOTAL 20

## Specific Requirements for the Minor in Physical Science

A minimum of 24 credits must be selected from the courses listed below:

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| PHYS | 110/L | Astronomy/L |  |
| PHYS | 150 | Elementary Concepts in Physics and Chemistry 1. |  |
| PHYS | 201/L | Principles of Physics $1 /$ Lab |  |
| PHYS | 202/L | Principles of Physics II/Lab |  |
| CHEM | 111/L | Principles of Chemistry/Lab. | ... 4 |
| EN | 103 | Problem Solving for Engineers | .... 3 |
| GEOL | 101/L | Earth Science/Lab ............... | ... 4 |

TOTAL 27

## Co-Curricular Requirements

The program faculty believes that students should have co-curricular experiences that complement and reinforce their academic experiences. Therefore, the faculty encourages students to join and participate in events sponsored by the department and the Society of Physics Students (SPS), Sigma Pi Sigma initiations, physics expositions, picnics, graduation dinners, potluck dinners, etc. to foster a spirit of camaraderie.

## Outcomes Assessment Activities

The Physics Program faculty will assess the skills, capacities, and knowledge of its majors as follows:

- The student must complete a senior research project including a formal presentation of results both in writing and orally to at least two members of the physics faculty (except for those in the teaching emphasis areas).
- The student must take the Physics Major Field Achievement Test offered by The Educational Testing Services (ETS) or another departmentally approved exam covering the sub-fields in physics at some point during his/her senior year (except for those in the teaching emphasis areas).
- By maintaining a portfolio for each student which contains college grades, records of special skills acquired, senior research project results, Field Achievement Test results and a record of cocurricular activities. The portfolio will remain on file in the department and will be added to as additional information is obtained from student or employer.

The program faculty believes that improvement in the skills, capacities, and knowledge of its minors can be assessed through required course work. The course grade will be a measure of the student's grasp of the basics in each discipline.

## THE HASAN SCHOOL OF BUSINESS

## Dr. Bruce C. Raymond, Dean

## HSB Majors and Minors

Majors: Accounting (BSBA)<br>Business Management (BSBA)<br>Emphasis Areas: Information Technology Marketing<br>Computer Information Systems (BS)<br>Economics (BSBA)<br>Emphasis Area:<br>Finance<br>Joint BSBA/MBA<br>Joint BS-CIS/MBA<br>MBA<br>(See the Graduate Studies section of this catalog for more information.)<br>\section*{Minors: Accounting}<br>Business Administration<br>Computer Information Systems<br>Computer Security<br>Economics<br>Finance<br>Marketing<br>Nonprofit Management<br>Supervisory Management

## Accreditation

The business majors (BSBA) of the Hasan School of Business are accredited by AACSB International - The Association to Advance Collegiate Schools of Business. AACSB is a not-for-profit corporation of educational institutions, corporations and other organizations devoted to the promotion and improvement of higher education in business administration and management. Organized in 1916, AACSB International is the premier accrediting agency for bachelor's, master's and doctoral degree programs in business administration and accounting.

## Mission

The mission of the Hasan School of Business at Colorado State University-Pueblo is to provide quality undergraduate and graduate business education for a diverse student population through our strong professional focus on contemporary business practices. Our educational programs prepare our students to assume team member and leadership roles in business by:

- Developing their skills in communication and critical thinking, and
- Instilling in them awareness of the global economy and ethical behavior.

The intellectual pursuits of our faculty focus primarily on applied scholarship and instructional development. Our outreach activities - developed in partnership with the community - serve to enhance the quality of life and economic well-being in southeastern Colorado.

## Learning Outcomes Assessment

The Hasan School of Business is committed to continuous improvement through a rigorous assessment program focused on measuring learning outcomes and implementing measures to enhance students' chances of success. Within each individual course, faculty members utilize a variety of assessment techniques, including: student presentations, projects, peer evaluations, examinations, and student surveys.

## Learning Goals for the Business Undergraduate Program

The Hasan School of Business faculty works diligently to provide undergraduates with a high-quality education that prepares them for entry into business or into a graduate program. Our programs prepare students through achievement of five primary learning goals.

## 1) Communication

Our students will be able to communicate effectively.
2) Problem Solving

Our students will be able to analyze problems and develop solutions.
3) Global Awareness

Our students will be able to apply global business concepts.
4) Ethical Awareness

Our students will be able to recommend ethical alternatives and appropriate actions.

## 5) Team Skills

Our students will be able to demonstrate effective team skills.

## Undergraduate Majors

The Hasan School of Business offers undergraduate majors in accounting, business management, business management with an information technology emphasis, business management with a marketing emphasis,
computer information systems, economics and economics with a finance emphasis. Graduates will be able to successfully compete for appropriate entry-level positions in private firms, nonprofit organizations or government. The accounting major prepares graduates for professional careers in accounting. The knowledge and skills acquired in the business management major can be used in a number of areas including human resource and operations management. The business management major with an emphasis in marketing prepares the graduate to successfully promote and sell goods and services. The CIS major prepares graduates for successful careers in the computer information systems and information technology (IT) fields. Economics majors are particularly well prepared to enter graduate programs in business, in addition to assuming entry-level positions in business firms, nonprofit organizations or government, as well as, positions in banking, financial analysis, and related financial services industries.

NOTE: Students planning to take professional certification exams in any field are encouraged to consult with their faculty advisor to understand any additional requirements.

## General Requirements for Business Majors (Accounting, Business Management and Economics)

All undergraduate business majors (accounting, business management and economics) take the Business Core. The Core prepares business majors with general business knowledge and skills. The Core also provides students with an understanding of and appreciation for the intellectual discipline needed for successful completion of a business major.

These courses provide students with the common body of knowledge needed for imaginative and responsible citizenship and leadership roles in business and society, domestically and globally. The Business Core is designed to provide students with the opportunity to integrate their educational experiences in business within a specific discipline and across disciplines.

An overall GPA of 2.000 is required in General Education Skills Component courses. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses. In addition, students must have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the Course Descriptions section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

## Business Core

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| ACCTG | 201 | Financial Accounting ........................... 3 |
| ACCTG | 202 | Managerial Accounting........................ 3 |
| BUSAD | 101 | Business Careers and Opportunities..... 1 |
| BUSAD | 265 | Inferential Statistics and Problem Solving.. 3 |
| BUSAD | 270 | Business Communications ................... 3 |
| BUSAD | 302 | Ethics in Business .............................. 3 |
| BUSAD | 360 | Advanced Business Statistics ............... 3 |
| BUSAD | 493 | Senior Seminar.................................. 1 |
| CIS | 100 | Introduction to Word and Windows........ 1 |
| CIS | 103 | PowerPoint and Web Publishing ........... 1 |
| CIS | 104 | Excel Spreadsheets ............................ 1 |
| ECON | 201 | Principles of Macroeconomics.............. 3 |
| ECON | 202 | Principles of Microeconomics ................ 3 |
| FIN | 330 | Principles of Finance ........................... 3 |
| MATH | 220 | Quantitative Analysis for Business ........ 4 |
| MGMT | 201 | Principles of Management................... 3 |
| MGMT | 301 | Organizational Behavior ....................... 3 |
| MGMT | 311 | Operations and Quality Management..... 3 |
| MGMT | 485 | Strategic Management ......................... 3 |
| MKTG | 340 | Principles of Marketing ........................ 3 |

TOTAL 51

## Majors and Emphasis Areas

(Specific course requirements are detailed later.)

## Select one:

Accounting ..... 24
Business Management. ..... 24
Business Management/Information Technology ..... 37
Business Management/Marketing ..... 24
Economics ..... 24
Economics/Finance. ..... 24

Business majors may take a second major in a business discipline that is not related to their first major discipline, provided that the additional 300/400-level credits associated with the second major are in addition to the credits needed to complete the first major (i.e., If the first major is 120 credits and the second major is 24 credits, then the total credits to complete the first major and the second major will be a minimum of 144). For example, a student earning the BSBA in business management could also major in accounting or economics.

Business majors may take a minor in a business discipline that is not related to their major discipline, provided that the additional 300/400-level credits associated with the minor are in addition to the credits needed to complete their major (i.e., If the major is 120 credits and the additional credits in the minor are 9 credits, then the total credits to complete the major and the minor will be a minimum of 129). For example, a student earning the

BSBA in business management could also minor in accounting or economics.

## Graduation Requirements for Business Majors (Accounting, Business Management, and Economics)

Students must satisfy the University general education requirements, the general institutional requirements, and have at least 120 total credit hours with a cumulative GPA of 2.000 to graduate.

An overall GPA of 2.000 is required in General Education Skills Component courses. All business majors are required to earn a C or better in Business Core courses and 300/400-level major courses.

## Credit Policy

To earn a BSBA from CSU-Pueblo, students must complete no fewer than 30 semester hours in business at the $3 / 400$ level in residence at CSU-Pueblo. Students who complete junior- and senior-level courses at other colleges or universities with grades of C - or better, and wish to apply the credits earned toward their degree, must request approval through the Dean or Faculty Chair. Courses taken without such approval will not be counted toward the fulfillment of degree requirements.

Only the Dean or the Faculty Chair may waive any portion of these requirements and only upon written petition by a student who has demonstrated extraordinary ability.

## Transfer Students

Undergraduate transfer work from other institutions is evaluated first by the Office of Admissions and Records, but final degree determination is made by the Hasan School of Business. The School of Business reserves the right to disallow any credit that is not appropriate degree credit as determined by the School.

## Summary of Graduation Requirements <br> (Accounting, Business Management, and Economics)

General Education......................................................... .36
Business Core................................................................ *45
Major .............................................................................. 24
Open Electives ............................................................... 15
TOTAL (minimum credits).......................................... 120
*ECON 201 and ECON 202 are counted in General Education.

## Summary of Graduation Requirements (CIS):

General Education ..... *36
Quantitative Analysis Requirement ..... 10
Required Related ..... 9
Open Electives ..... 13
Major ..... 52
TOTAL (minimum credits) ..... 120
*Must include SPCOM 103 or equivalent; ECON 201 and202, and MATH 121.

## Co-Curricular Opportunities

Co-curricular activities are encouraged for all Hasan School of Business students. Included are internships, student clubs, and seminar programs. A current list of clubs is available in the Hasan School of Business or on the CSU-Pueblo web site.

## Outcomes Assessment Activities

## Assurance of Learning

The use of direct measures of student performance in the Hasan School of Business provides a relevant set of performance data. Reviewed by faculty, discipline groups, the School's Assurance of Learning Committee, and administrators, results of these measures are used to make program improvements. In addition to course grades, direct measures of student performance in the school of Business include:

- The Educational Testing Service (ETS) Major Field Test in Business. This test, administered nationwide, assesses what students have learned in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally. In the Hasan School of Business, the Major Field Test is given to students in the BUSAD 493 capstone course in their senior year.
- Course-Embedded Measures. Exams, papers, presentations, and projects include course-embedded measures that can be used to assess student performance.

The Hasan School of Business compiles information to assess the success of graduates. Information is obtained from the CSU-Pueblo Alumni Office, the Career Center, and other sources.

## Advising

All pre-business students, business majors, and CIS majors are advised in the Hasan School of Business. Students are required to meet with an HSB advisor each
term to plan their course schedules for the upcoming term. In addition, consulting with an advisor is necessary in declaring a business major, applying for an internship and filing a graduation planning sheet.

## Student Files

Student files are maintained to help track each student's progress at various checkpoints. Files are kept in a central file in the Hasan School of Business, accessible to the administration, the student, the student's advisor, and the faculty of the school.

## ACCOUNTING MAJOR

Faculty: Eriksen, Lin, Wink

The major in accounting leads to the Bachelor of Science in Business Administration (BSBA). The primary objective is to provide an academic program that covers the conceptual basis of accounting as well as the application of accounting doctrine in current accounting practice. The programs of study are functional in that they provide the broad base of knowledge required by the accounting profession.


## Requirements for the Accounting Minor

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ACCTG | 201 | Financial Accounting | . 3 |
| ACCTG | 202 | Managerial Accounting. | . 3 |
| ACCTG | 301 | Intermediate Accounting I. | . 3 |
| ACCTG | 320 | Cost Accounting | . 3 |
| ACCTG | 3/400 | Elective. | . 3 |
| ECON | 202 | Principles of Microeconomics . | ... 3 |
| MGMT | 201 | Principles of Management...... | ...... 3 |
|  |  |  | AL 21 |

A GPA of 2.000 or higher is required for the minor.

## BUSINESS MANAGEMENT MAJOR

Faculty: Ahmadian, Billington, Brennan, Fowler, Fronmueller, Gilbreath, Hanks, Joo, Kwon, Norman, Shah, Wakefield

The major in business management leads to the Bachelor of Science in Business Administration (BSBA) and provides students with the theoretical and conceptual basis of business as well as application skills to assume leadership roles in industry, government and education.

The undergraduate business management major permits students to select one area as an emphasis. The knowledge and skills acquired with the major in business management can be used in a number of areas, such as human resource and operations management. The business management major with an information technology emphasis prepares students for careers in managing technology in modern organizations.

The business management major with a specialization in marketing prepares the graduate to successfully promote and sell goods and services.

## Requirements for the Business Management Major

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| MGMT | 318 | Human Resource Management |  |
| MGMT | 365 | Management Information System | 3 |
| MGMT | 475 | International Management OR |  |
| MKTG | 475 | International Marketing. |  |
| MGMT | 3/400 | Electives |  |
| Business Electives (3/400-level) |  |  |  |
|  |  |  | TAL 24 |
| Requirements for the Business Management Major with Information Technology Emphasis |  |  |  |
| Courses |  | Titles | Credits |
| MGMT | 318 | Human Resource Management | ........ 3 |
| MGMT | 368 | Project Management | .. 3 |
| MGMT | 475 | International Management OR |  |
| MKTG | 475 | International Marketing. | .... 3 |
| CIS | 150 | Computer Information Systems. | ....3 |
| CIS | 171 | Introduction to Java Programming |  |
| CIS | 185 | PC Architecture... | *3 |
| CIS | 240 | Object Oriented Analysis and Des | gn...... 3 |
| CIS | 289 | Network Concepts........ |  |
| CIS | 311 | Introduction to Web Development | ..... 3 |
| CIS | 350 | Data Base Systems... |  |
| MGMT | 3/400 | Elective . | . 3 |
| Business | /CIS | Elective (3/400-level) | .... 3 |

${ }^{*}$ CIS 150, 171, 185, 240, and 289 replace the 15 credits of open electives in the Business Management graduation requirements.

Additional Requirements
Courses

## Credits

Open Electives .................................................................. 2
$\overline{\text { TOTAL } 2}$

## Requirements for the Business Management Major with Marketing Emphasis

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| MGMT 365 |  | Management Information Systems | ......... 3 |
| MKTG | 441 | Marketing Strategies |  |
| MKTG | 3/400 | Electives |  |
| Business Elect |  | ives (3/400-level) |  |
|  |  |  | TAL 24 |
| Business Minors |  |  |  |
| Requirements for the Business Administration Minor (open to non-business majors only) |  |  |  |
| Courses |  | Titles | Credits |
| ACCTG | 201 | Financial Accounting | ... 3 |
| ACCTG | 202 | Managerial Accounting. | ....... 3 |
| ECON | 201 | Principles of Macroeconomics. | ...... 3 |
| ECON | 202 | Principles of Microeconomics. | .... 3 |
| FIN | 330 | Principles of Finance.. |  |
| MGMT | 201 | Principles of Management. | .......... 3 |
| MKTG | 340 | Principles of Marketing ....... | ...... 3 |

TOTAL 21

## Requirements for the Marketing Minor

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| ACCTG | 201 | Financial Accounting ................................ 3 |
| ECON | 202 | Principles of Microeconomics ............... 3 |
| MGMT | 201 | Principles of Management................... 3 |
| MKTG | 340 | Principles of Marketing ..................... 3 |
| MKTG | $3 / 400$ | Marketing Electives ................................ 9 |

TOTAL 21

## Requirements for the Nonprofit Management Minor

Courses Titles Credits

ACCTG 201 Financial Accounting .............................. 3
BUSAD 270 Business Communication........................ 3
ECON 202 Principles of Microeconomics ................. 3
MGMT 201 Principles of Management ....................... 3
MKTG 340 Principles of Marketing ............................ 3

Select three of the following:
FIN 330 Principles of Finance ............................... 3
MGMT 301 Organizational Behavior.......................... 3
MGMT 318 Human Resource Management.............. 3
POLSC 330 Intro to Public Administration................... 3
POLSC 340 Public Policy........................................... 3
POLSC 411 Legislatures and Legislation................... 3
Internship Option................................................................ 3
(The student may earn a 3-credit internship in a
nonprofit organization. Internship opportunities must
be approved by the appropriate department chair.)
$\overline{\text { TOTAL } 24}$

## Requirements for the Supervisory Management Minor

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| ACCTG | 201 | Financial Accounting ............................. 3 |
| ACCTG | 202 | Managerial Accounting...................... 3 |
| ECON | 202 | Principles of Microeconomics .................... 3 |
| MGMT | 201 | Principles of Management................... 3 |
| MGMT | 301 | Organizational Behavior.................... 3 |
| MGMT | 318 | Human Resource Management........... 3 |
| MGMT | 410 | Labor Management ................................ 3 |

TOTAL 21
A GPA of 2.000 or higher is required for the minors.

## COMPUTER INFORMATION SYSTEMS DEPARTMENT

Faculty: Cho, Huff, Long, Ma, Martinez, San Nicolas-Rocca

The Bachelor of Science (BS) degree in Computer Information Systems (CIS) prepares graduates for successful careers in the computer information systems and information technology (IT) fields. Students complete a comprehensive, relevant, computer information systems curriculum that delivers high-demand knowledge, skills, and abilities in: software and web application development, system analysis and design, network design and administration, database design and development, operating systems, and IT security.

The CIS program also includes a Computer Security certificate for non-degree seeking students awarded by the CIS department.

## Program Objectives

The program seeks to develop a deeper understanding of the role of information systems within organizations and
the processes that support technology-enabled business development. At the conclusion of the CIS program, students will demonstrate the ability to:

1) Analyze, design, implement, and maintain an information system.
2) Communicate clearly and effectively in writing and speaking.
3) Work effectively as a team member for a common purpose.
4) Identify ethical issues and provide alternatives or solutions.

## Outcomes Assessment Activities

The CIS program primarily uses a direct-assessment approach. Artifacts of student work pertinent to a particular learning outcome are collected. These artifacts are then evaluated by faculty external to the course in which the artifact was collected to determine students' level of mastery. Each learning outcome has been separated into sub-skills, or "measurable objectives", that are components of the overall learning objectives. Students' level of mastery is assessed using rubrics which have been developed for this purpose. To ensure inter-rater reliability, we implement processes whereby raters meet before and after artifacts are assessed. In addition, for follow-up (loop-closing) activities on subsequent artifact evaluation, the same raters are utilized when possible, for consistency and reliability.

The CIS program includes a senior capstone project course required of all majors. This course requires students to apply the communication, problem solving, and technical skills they have learned during the completion of the CIS program. Each team of students is assigned a live project in the Pueblo community (or sometimes surrounding areas). The team is evaluated on not only the final IT product they develop, but the process they follow in completing the project.

Finally, the CIS program meets annually with the CIS Industrial Advisory Committee to get feedback on the effectiveness of the CIS curriculum in meeting the needs of the IT industry along the Colorado Front Range. The CIS program also requires CIS graduates to complete a survey to determine the effectiveness of the program and curriculum in preparing them for jobs in IT.

## General Requirements

- Students majoring in computer information systems must maintain grades of $C$ or higher in all CIS courses. In addition, all required CIS prerequisites must be completed with a grade of $C$ or higher.
- Students must complete at least 120 semester hours in an approved program of study, including 52 hours in the major.
- Students must complete a minimum of 21 credits of CIS upper-division course work. At least 16 of these upper-division CIS credits must be taken in residence.
- Students must complete a course planning worksheet and participate in the advisement process with a CIS faculty advisor.


## Specific Requirements

CIS majors complete a total of 120 credits. These credits include 36 credit hours of general education, 52 credits in CIS major courses, 10 credits of quantitative analysis, 9 credits of required related non CIS courses and 13 credits of electives. CIS majors are encouraged to complete a minor in Business Administration or another Businessrelated minor. The minor may be completed within the 13 elective credits. The general elective courses must include the specific courses listed below.

## General Education

Please refer to the General Education Requirements in the Undergraduate Programs section of this catalog. In meeting CSU-Pueblo's general education requirement, CIS majors must include the following:

Humanities: $\quad 3$ credits of SPCOM 103 or equivalent
Social Science: ECON 201 and ECON 202
Mathematics: MATH 121

## Quantitative Analysis Requirement

| Courses | Titles |
| :--- | :--- | | Credits |
| ---: |
| MATH 220 | | Quantitative Analysis for Business ......... 4 |
| :--- |
| BUSAD 265 |
| Inferential Statistics and Problem |
| Solving ................................................ 3 |

## Required Related Courses

BUSAD 270 Business Communications ..................... 3
MGMT 201 Principles of Management...................... 3
MGMT 368 Project Management .............................. 3

## CIS Major Courses:

| CIS Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| CIS | 100 | Intro to Word \& Windows. |  |
| CIS | 103 | PowerPoint \& Web Publishing | .... 1 |
| CIS | 104 | Excel Spreadsheets | ... 1 |
| CIS | 105 | MS Access DBMS | 1 |
| CIS | 150 | Computer Information Systems | ..... 3 |
| CIS | 171 | Intro to Java Programming . | .... 4 |
| CIS | 185 | PC Architecture . | ...... 3 |
| CIS | 240 | Object-Oriented Analysis \& Des | n ........ 3 |


| CIS | 271 | Adv. Program Design with Java ............ 4 |
| :---: | :---: | :---: |
| CIS | 289 | Network Concepts ............................... 3 |
| CIS | 311 | Introduction to Web Development .......... 3 |
| CIS | 315 | UNIX Operating System ....................... 3 |
| CIS | 350 | Data Base Systems ............................. 3 |
| CIS | 432 | Senior Professional Project .................. 6 |
| CIS | 493 | Senior Seminar.................................. 1 |
| CIS | 3/400 | Emphasis Area Electives.................... 12 |

Students may select from the wide range of CIS electives listed below. By carefully selecting from the list, students may focus their CIS major in one of the following areas: computer security, software and web application development, systems analysis and design, database design and development, and network design and administration.

## CIS Electives (must total 12 credits)

| CIS Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| CIS | 356 | Mobile Application Development |  |
| CIS | 359 | Advanced Programming with C\# |  |
| CIS | 360 | IT Security | 3 |
| CIS | 401 | Network Systems Admin |  |
| CIS | 402 | Linux Networks \& Routing | 3 |
| CIS | 411 | Internet Server-Side Programming | g........ 3 |
| CIS | 450 | Database Systems II |  |
| CIS | 461 | IT Security Management |  |
| CIS | 462 | Computer Forensics |  |
| CIS | 481 | IT Implementation. | 3 |
| CIS | 482 | IT Strategy. | . 3 |
| CIS | 490 | Special Projects.. | ...1-5 |
| CIS | 491 | Special Topics | ....1-5 |
| CIS | 498 | Internship.. | ...1-5 |

## Business Environment

In addition to the requirement to complete the business courses (ECON 201, ECON 202, MGMT 201, MGMT 368, and BUSAD 270), CIS majors are strongly encouraged to complete a minor in Business Administration, Marketing, Nonprofit Management, Supervisory Management, Economics, or Accounting.

## CIS MINOR

Non-CIS majors who wish to minor in CIS have several options. They may build their own minor based on the completion of seven core courses and one of five separate tracks. Students must complete a minimum of six credits of upper-division CIS courses.

## Computer Information Systems Minor

Students who prefer a minor complete the following core and one of the listed tracks.

| CIS Minor Core |  |  |
| :---: | :---: | :---: |
| CIS | urses | Titles Credits |
| CIS | 100 | Introduction to Word and Windows........ 1 |
| CIS | 103 | PowerPoint \& Web Publishing............... 1 |
| CIS | 104 | Excel Spreadsheets ........................... 1 |
| CIS | 105 | MS Access DBMS .............................. 1 |
| CIS | 150 | Computer Information Systems ............. 3 |
| CIS | 171 | Introduction to Java Programming......... 4 |
| CIS | 240 | Object Oriented Analysis and Design..... 3 |

## Personal Computers/Local Area Network Support

| CIS Courses | Titles | Credits |
| :--- | :--- | ---: |
| CIS | Minor Core......................................$~$ | 14 |

CIS 185 PC Architecture ..... 3
CIS 289 Network Concepts ..... 3
CIS 401 Network Systems Administration
ORCIS 402 Linux Networks and Routing3
TOTAL 23
Information Analyst
CIS Courses Titles Credits
CIS 311 Introduction to Web Development ..... 3
CIS 350 Database Systems ..... 3
CIS 450 Advanced Database Structures ..... 3
TOTAL ..... 23
Web Development Specialist

| CIS Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| CIS |  | Minor Core ......................................... 14 |
| CIS | 271 | Advanced Program Design with Java.... 4 |
| CIS | 311 | Introduction to Web Development ......... 3 |
| CIS | 411 | Internet Server-Side Programming....... 3 |

TOTAL 24

## Software Engineer/Programmer

| CIS Courses | Titles | Credits |
| :---: | :---: | :---: |
| CIS | Minor Core | . 14 |
| CIS 271 | Adv. Program Design with Java | va ............ 4 |
| CIS 356 | Mobile Application Developm | ent ........... 3 |
| CIS 359 | Advanced Programming with | C\#........... 3 |
|  |  | TOTAL 24 |
| Computer Security |  |  |
| CIS Courses | Titles | Credits |
| CIS | Minor Core ..... | ............. 14 |
| CIS 360 | IT Security .. | ........ 3 |


| CIS | 461 | IT Security Management ........................... 3 |
| :--- | :--- | :--- |
| CIS | 462 | Computer Forensics ....................... 3 |

## COMPUTER SECURITY CERTIFICATE

Non-degree seeking students may earn a Computer Security certificate from the CSU-Pueblo CIS program by completing the following courses. Students interested in the certificate program should contact the CIS department for further information. Certificates do not appear on the CSU-Pueblo transcript.

|  | ses | Titles | Credits |
| :---: | :---: | :---: | :---: |
| CIS | 185 | PC Architecture | . 3 |
| CIS | 289 | Network Concepts |  |
| CIS | 315 | Unix Operating Systems. | . 3 |
| CIS | 360 | IT Security | 3 |
| CIS | 461 | IT Security Management | 3 |
| CIS | 462 | Computer Forensics | . 3 |
| CIS | 401 | Network Systems Administration OR |  |
| CIS | 402 | Linux Networks and Routing... | ....... 3 |

## SUB-TOTAL 21

## ECONOMICS MAJOR

Faculty: Duncan, Hassan, Regassa, Whited

The major in economics leads to the Bachelor of Science in Business Administration (BSBA) and provides students with the theoretical and conceptual basis of economics. Economics majors are particularly well prepared to enter graduate programs in business in addition to assuming entry-level positions in business firms, nonprofit organizations or government. The major in economics also prepares the graduate for positions in banking, financial analysis, and related financial services industries.

## Requirements for the Economics Major

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ECON | 302 | Intermediate Microeconomics | ..... 3 |
| ECON | 310 | Money and Banking |  |
| ECON | 420 | Regional Economic Analysis | .... 3 |
| FIN | 3/400 | Elective |  |
| BUSAD | 480 | Business Consulting |  |
| MGMT | 414 | Entrepreneurship. |  |
| Business Electives (3/400-level) |  |  |  |

## Requirements for the Economics Major with Finance Emphasis

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | ---: |
| ECON | 302 | Intermediate Microeconomics ............ 3 |  |
| ECON | 310 | Money and Banking ..................... 3 |  |
| FIN | $3 / 400$ | Electives....................................... 15 |  |

One elective from the following:......................................... 3

| ACCTG | 301 | Intermediate Accounting I ........... 3 |
| :--- | :--- | :--- |
| BUSAD | 480 | Business Consulting .................. 3 |
| MGMT | 414 | Entrepreneurship ................... 3 |

$\overline{\text { TOTAL } 24}$

## Requirements for the Economics Minor

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| ACCTG | 201 | Financial Accounting ......................... 3 |
| ECON | 201 | Principles of Macroeconomics .............. 3 |
| ECON | 202 | Principles of Microeconomics .............. 3 |
| ECON | 302 | Intermediate Microeconomics............ 3 |
| ECON | 310 | Money and Banking........................ 3 |
| MGMT | 201 | Principles of Management................... 3 |
|  |  |  |
| One elective from the following ......................................... 3 |  |  |
| ECON | 420 | Regional Economic Analysis ........ 3 |
| FIN | $3 / 400$ | Elective................................................ 3 |
| BUSAD | 480 | Business Consulting .................. 3 |

TOTAL 21

## Requirements for the Finance Minor

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ACCTG | 201 | Financial Accounting | 3 |
| ECON | 201 | Principles of Macroeconomics | . 3 |
| ECON | 202 | Principles of Microeconomics | ..... 3 |
| FIN | 330 | Principles of Finance ... | .... 3 |
| FIN | 3/400 | Electives | .... 6 |
| MGMT | 201 | Principles of Management . | ...... 3 |

A GPA of 2.000 or higher is required for the minors.

## JOINT BSBA/MBA

## (3 PLUS 2 PROGRAM)

## Admission Requirements

The BSBA/MBA program is unique. It allows qualified students to earn both a BSBA and an MBA concurrently.

Students are required to take the Graduate Management Admissions Test (GMAT). An admission index formula of 200 times the undergraduate GPA (4.000 system) plus the GMAT score is used as an admission score. The undergraduate GPA must be based on a minimum of 90 semester hours of course work including MGMT 201, FIN 330, and MKTG 340. Students must have a minimum GPA of 3.25 and a GMAT of at least 450 (i.e., an index of 1100) to be admitted to the program. Students who fail to meet these requirements may provide additional evidence of their ability to complete the program. Such evidence may include: performance in outside activities, evidence of creativity or leadership, and a record of accomplishment.

Prior to enrolling in the first 500-level course, students are expected to have completed a significant portion of the requirements for their undergraduate major and must have submitted an acceptable GMAT.

NOTE: Students are strongly encouraged to complete an internship prior to enrolling in graduate-level courses.

## General Requirements

Students in the joint BSBA/MBA program must complete:

- The Undergraduate Business Core (excluding BUSAD 302, MGMT 301, MGMT 311, and MGMT 485);
- BUSAD 493;
- A major within the Hasan School of Business; and
- All remaining specified MBA courses.

In addition, students must satisfy all GPA requirements for the BSBA and the MBA (see the MBA listing under the Graduate Programs section of the catalog).

## MBA Core

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| ACCTG | 510 | Managerial Accounting ......................... 3 |
| BUSAD | 502 | Business Ethics and Environment ......... 3 |
| BUSAD | 575 | International Business ........................... 3 |
| ECON | 510 | Economics for Managers................... 3 |
| FIN | 530 | Financial Management ........................ 3 |
| MGMT | 511 | Production/Operations Management..... 3 |
| MGMT | 520 | Management of Organizational |
|  |  | Behavior ............................................ 3 |
| MGMT | 565 | Management Information Systems ........ 3 |
| MGMT | 585 | Management Policy \& Strategy .............. 3 |
| MKTG | 540 | Marketing Management..................... 3 |

In addition, the following MBA courses must be completed:

## Courses

Credits
Approved Graduate Electives. .6

In summary, the joint degree plan has the following requirements:
General Education ..... 36
Open Electives ..... 15
Business Core. ..... *33
Business Major ..... 24
MBA requirements ..... 36
JOINT DEGREE TOTAL ..... 144
*Econ 201 and ECON 202 are counted in General Education.

Students who complete part of the joint degree plan but decide to opt out of the MBA program and continue towards earning only the BSBA are granted credit towards the BSBA for 500-level courses taken as follows:

| 500-Level Course Taken |  | $300-$ and $400-L e v e l$ |  |
| :---: | :---: | :---: | :---: |
|  |  | Course | edit |
| ACCTG | 510 | ACCTG | 495 |
| BUSAD | 502 | BUSAD | 302 |
| ECON | 510 | ECON | 308 |
| MGMT | 511 | MGMT | 311 |
| MGMT | 520 | MGMT | 301 |
| MGMT | 585 | MGMT | 485 |
| MKTG | 540 | MKTG | 495 |
| ACCTG, BUSAD, ECON, FIN, MGMT, MKTG |  |  |  |
|  | 575 |  | 475 |

## JOINT BS-CIS/MBA

## (3 PLUS 2 Program)

## Admission Requirements

The BS-CIS/MBA program is unique. It allows qualified students to earn both a BS degree in CIS and an MBA concurrently.

Students are required to take the Graduate Management Admissions Test (GMAT). An admission index formula of 200 times the undergraduate GPA (4.000 system) plus the GMAT score is used as an admission score. The undergraduate GPA must be based on a minimum of 90 semester hours of course work, including MGMT 201, FIN 330, and MKTG 340. Students must have a minimum GPA of 3.25 and a GMAT of at least 450 (i.e., an index of 1100) to be admitted to the program. Students who fail to meet these requirements may provide additional evidence of their ability to complete the program. Such evidence may include: performance in outside activities, evidence of creativity or leadership, and a record of accomplishment.

Prior to enrolling in the first 500-level course, students are expected to have completed a significant portion of the
requirements for their undergraduate major and must have submitted an acceptable GMAT.

NOTE: Students are strongly encouraged to complete an internship prior to enrolling in graduate-level courses.

## General Requirements

Students in the joint BS-CIS/MBA program must complete:

- The CIS required and required-related courses excluding CIS 350 and CIS 432;
- ACCTG 201, ECON 202, FIN 330 and MKTG 340;
- The CIS major within the Hasan School of Business; and
- All remaining specified MBA courses.

In addition, students must satisfy all GPA requirements for the BS in CIS and the MBA (see the MBA listing under the Graduate Programs section of the catalog).

## MBA Required Courses

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| ACCTG | 510 | Managerial Accounting ......................... 3 |
| BUSAD | 502 | Business Ethics and Environment ......... 3 |
| ECON | 510 | Economics for Managers ...................... 3 |
| FIN | 530 | Financial Management ........................ 3 |
| MGMT | 511 | Production/Operations Management...... 3 |
| MGMT | 520 | Management of Organizational <br> Behavior $\qquad$ |
| MGMT | 585 | Management Policy \& Strategy ............. 3 |
| MKTG | 540 | Marketing Management....................... 3 |
| In addit complete |  | the following CIS courses must be |
| Courses |  | Titles Credits |
| CIS | 532 | Senior Professional Project .................. 6 |
| CIS | 550 | Data Base Systems ............................ 3 |
| CIS | 581 | IT Implementation OR |
| CIS | 582 | IT Strategy........................................ 3 |

TOTAL GRADUATE 36

In summary, the joint degree plan has the following requirements:

General Education........................................................... 36
Quantitative Analysis........................................................ 10
Required-related Courses .................................................. 9
Courses toward Business Administration Minor .............. 13
CIS Required Courses .................................................... 31
CIS Elective Courses .......................................................... 9
MBA Requirements .......................................................... 36

JOINT DEGREE TOTAL 144

Students who complete part of the joint degree plan but decide to opt out of the MBA program and continue toward earning only the BS in CIS are granted credit toward the BS for 500-level courses taken as follows:

| 500-Level <br> Course Taken | 300- and <br> Course |  | Credit |
| :--- | ---: | :--- | :--- |

## COURSE DESCRIPTION INFORMATION

Colorado State University-Pueblo does not offer all the courses listed in this catalog every semester or every year.

Each semester the University creates an on-line course offering module listing a detailed schedule of courses offered and the times and places of instruction. Courses listed in the on-line course offering module are subject to change.

## EXPLANATORY NOTES

## Numbering of Courses

Course numbering is based on the content level of material presented in courses.

Courses numbered:
000-099 Remedial; do not count toward graduation
100-299 Freshmen/Sophomore level
(lower division)
300-499 Junior/Senior level
(upper division)
500-699 Graduate level
900-999 Post-master's

## Variable Credit Courses

(1-3 VAR) indicates variable credit; the minimum and maximum credit limitations. An example:

## 494 Field Experience (1-5 VAR)

Off-campus individual experience providing transition from classroom instruction to on-the-job experience. Supervised by instructor and job supervisor. Prerequisite: senior standing and permission of instructor.

## Cross-listed Courses

Courses in which students may earn credit under either (but not both) of two prefixes (e.g., SOC or HIST) for the same offering.

## Corequisite

A requirement which must be taken concurrently with another course of instruction.

## Prerequisite

A requirement which must be fulfilled before a student can enroll in a particular course.

## Repeatable

Some specified courses may be repeated for credit. These courses are designated by the word Repeatable in the Course Description section of this catalog. The number after the word Repeatable indicates the maximum number of credits that may be used toward degree requirements.

## Cancellation of Courses

The University reserves the right to cancel courses not selected by an adequate number of students or not suitably staffed by qualified faculty.

## KEYS TO SYMBOLS

Course descriptions include a variety of symbols conveying essential information. The following standard course description with explanation of symbols serves as a model:

MUS 127 Functional Piano I: Beginning 1(0-2)
For students with no piano experience. Introduces fundamentals, with emphasis on providing skills necessary for successful completion of the Proficiency Exam. May be repeated. (F,S) Repeatable (2)

MUS. $\qquad$ course prefix
127. $\qquad$ course number

Functional Piano I: Beginning .. course title
1(0-2) .............................number of credits (clock
hours in lecture per week -
clock hours in laboratory
demonstration or studio
experiences per week)

Note: Not all of the above information may be noted in each course. Additional symbols include:

F Taught fall semester
S Taught spring semester
SS Taught summer session

* Offered upon demand

O Taught odd numbered years
E Taught even numbered years
VAR Variable credit course
L Suffix indicating lab course
IP Grade of IP (In Progress) available
S/U Grade of S or U available

## UNIVERSITY-WIDE <br> "HOUSE-NUMBERED" COURSES

$200,300,400,500,600,900$
$290,390,490,590,690,990$
$291,391,491,591,691,991$
$292,392,492,592,692,992$
$293,393,493,593,693,993$
$294,394,494,594,694,994$
$295,395,495,595,695,995$
$296,396,496,596,696,996$
$297,397,497,597,697,997$
$298,398,498,598,698,998$
$599,699,999$

Workshop
Special Project
Special Topics
Research
Seminar Field Experience
Independent Study
Cooperative Ed
Studio Series
Internship
Thesis Research

## COURSE PREFIXES

Courses of instruction are identified by the following approved prefixes:

| ACCTG | - | Accounting |
| :--- | :--- | :--- |
| AIM | - | Automotive Industry Management |
| ANTHR | - | Anthropology |
| ART | - | Art |
| AT |  | Athletic Training |
| BBE | - | Bilingual Bicultural Education |
| BIOL | - | Biology |
| BUSAD | - | Business Administration |
| CET | - | Civil Engineering Technology |
| CHEM | - | Chemistry |
| CIS | - | Computer Information Systems |
| CM | - | Construction Management |
| CS | - | Chicano Studies |
| DS |  | Diversity Studies |
| ECON | - | Economics |
| ED | - | Education |
| EE | - | Electrical Engineering |
| EN | - | Engineering |
| ENG | - | English |
| ESL | - | English as a Second Language |
| EXHP | - | Exercise Science and Health Promotion |
| FIN | - | Finance |
| FL | - | Foreign Language |
| FRN | - | French |
| GEOG | - | Geography |
| GEOL | - | Geology |
| GER | - | German |
| HIST | - | History |
| HONOR |  | Honors |
| INTL | - | International Studies |
| ITL | - | Italian |
| MATH | - | Mathematics |
| MCCNM | - | Mass Communications/Center New Media |
| ME | - | Mechanical Engineering |
| MGMT | - | Management |
| MKTG | - | Marketing |
| MSL | - | Military Science and Leadership |
| MUS | - | Music |
| NSE | - | National Student Exchange |
| NSG | - | Nursing |
| PHIL | - | Philosophy |
| PHYS | - | Physics |
| POLSC | - | Political Science |
| PSYCH | - | Psychology |
| RDG | - | Reading |
|  |  |  |
| ABS |  |  |

## REC

RUS

- Russian
- Science

SOC - Sociology
SOCSC - Social Science
SPCOM - Speech Communication
SPN - Spanish
SW - Social Work
TH - Theatre
US - University Studies
WS - Women's Studies

## COURSE DESCRIPTIONS

## ACCOUNTING (ACCTG)

## UNDERGRADUATE COURSES

ACCTG 201 Principles of Financial Accounting 3(3-0)
Introduction to accounting as the language of business. Emphasis on reasoning and logic of external reporting model. May include computer-based applications. Prerequisite: MATH 121. (*)

ACCTG 202 Principles of Managerial Accounting 3(3-0)
Managerial uses of accounting information, including costbased, decision making, differential accounting, and responsibility accounting. May include computer-based applications. Prerequisite: ACCTG 201, (*)

## ACCTG 301 Intermediate Accounting I 3(3-0)

Conceptual framework, accounting cycle, financial statements, time value of money, revenue recognition, and accounting for cash, receivables, inventory, and long-term assets. Prerequisite: ACCTG 202 and junior standing. (F)

ACCTG 302 Intermediate Accounting II 3(3-0)
Investments, liabilities, bonds, leases, income taxes, pensions, employee benefit plans, shareholder equity, earnings per share, accounting changes and errors, and the statement of cash flows. Prerequisite: ACCTG 301. (S)

## ACCTG 311 Federal Income Tax 3(3-0)

Federal income tax as applied to income recognition, exclusions from income and property transactions of individuals. Introduction to tax research resources and techniques. Prerequisite: ACCTG 202. (*)

ACCTG 320 Cost Accounting 3(3-0)
Accounting procedures applicable to industries with emphasis on job order process costs, standard cost and profit planning including differential costs, internal profit and price policies, and capital budgeting. Prerequisite: ACCTG 202 and junior standing. (*)

## ACCTG 330 Accounting Information Systems 3(3-0)

The study of design and implementation of accounting information systems. Attention directed to the traditional accounting model and its relationship to computerized accounting information systems. Prerequisite: ACCTG 202. (*)

## ACCTG 401 Advanced Financial Accounting 3(3-0)

Application of fundamental theory to partnerships, international operations, consolidated statements, and business combinations; introduction to government. Prerequisite: ACCTG 302. (*)

## ACCTG 404 CPA Law 3(3-0)

Business law as found in the Regulation section of the Uniform CPA examination. Prerequisite: senior standing, accounting major. (*)

## ACCTG 410 Auditing 3(3-0)

A study of the systematic process by which external financial statements and other management assertions are verified and reported upon by independent, internal, and governmental auditors. Prerequisite: ACCTG 302 and 330. (*)

ACCTG 411 Corporate, Estate and Gift Tax 3(3-0)
Taxation of corporations, partnerships, estates/trusts. Analysis of mergers and dissolution of corporations. Introduction to estate/gift taxes and international taxation. Prerequisite: ACCTG 311. (*)

ACCTG 491 Special Topics (1-3 VAR)
(*) Repeatable (6)
ACCTG 495 Independent Study (1-3 VAR)
Prerequisite: senior standing, accounting major and adviser permission. (*) Repeatable (6)

## ACCTG 498 Internship (1-6 VAR)

Supervised field work in selected business, social and governmental organizations; supplemented by written reports. (S/U grading.) Prerequisite: junior or senior standing in School of Business and permission of internship coordinator. (*) Repeatable (6)

## GRADUATE COURSES

ACCTG 501 Fundamentals of Accounting 1.5(1.5-0)
This class, as an MBA leveling course, provides a basic understanding of financial reporting accounting, including the accounting cycle, financial statement preparation, and internal controls. Prerequisite: admission to MBA. (*)

ACCTG 505 Principles of Financial Accounting 3(3-0)
Introduction to accounting as the language of business. Emphasis on reasoning and logic of external reporting model. May include computer-based applications. (*)

ACCTG 510 Managerial Accounting 3(3-0)
Accounting concepts and methods utilized in managerial planning, budgeting, controlling, and evaluating to optimize decision making. Prerequisite: admission to MBA or permission of MBA Director. (*)

## ACCTG 511 Tax Planning and Research 3(3-0)

Advanced study of tax research methodology, IRS and professional guidelines on tax positions, appreciation of research skills, planning techniques to individual, corporate, partnership cases. Prerequisite: ACCTG 311. (*)
ACCTG 520 Advanced Cost Management Systems 3(3-0) Cost systems supporting new management philosophies-JIT, total quality management, continuous improvement, process reengineering. Activity-based costing, target costs, cost of quality. Prerequisite: ACCTG 320 and admission to MBA or permission of MBA Director. (*)

ACCTG 591 Special Topics 3(3-0)
Critical review and discussion of relevant accounting topics. (*) Repeatable (6)

## ACCTG 595 Independent Study (1-3 VAR)

Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

## AUTOMOTIVE INDUSTRY MANAGEMENT (AIM) UNDERGRADUATE COURSES

## AIM 105 Introduction to the Parts and Service Industry

 1(1-0)Introduction to the industry from viewpoint of history, social impact, organization structure, manpower needs, and future growth. (F)

## AIM 115 Automotive Engine Design, Operation and

 Repair 5(3-4)Design, operation and repair techniques of current and future automotive engines. (F)

## AIM 125 Automotive Suspension and Brake Systems

 3(3-0)Design and theory of front and rear automotive suspensions, steering, and brake systems. (F)

AIM 125L Automotive Suspension and Brake Systems Lab 1(0-2)
Corequisite: AIM 125. (F)

## AIM 155 Automotive Parts Operations 4(4-0)

The complete spectrum of jobber and dealer parts department, from counter to manager operations, to include electronic cataloging, customer service, introduction of parts computers. (F)

AIM 165 Automotive Power Trains and Drive Lines 3(3-0) Design and theory of standard and automatic transmissions, clutches, drive lines, differentials, and transaxles. Corequisite: AIM 165L. (S)
AIM 165L Automotive Power Trains and Drive Lines Lab 1(0-2)
Corequisite: AIM 165. (S)
AIM 235 Automotive Fuel Systems and Exhaust Emissions 3(3-0)
Design and theory of automotive fuel systems, fuel injection, and supercharging; functions and design of automotive emissions systems. Prerequisite: AIM 115 and AIM 245 or permission of instructor. Corequisite: AIM 235L. (S)

AIM 235L Automotive Fuel Systems and Exhaust Emissions Systems Lab 1(0-2)
Corequisite: AIM 235. (S)
AIM 245 Automotive Electrical Systems I 3(3-0)
Design and theory of operation of automotive electrical circuits; ignition, starting, charging, and accessory circuits, with study of diagnostic equipment used to diagnose system malfunctions. (F)

## AIM 245L Automotive Electrical Systems Laboratory I 1(0-2)

Corequisite: AIM 245. (F)
AIM 255 Automotive Electrical Systems II 3(3-0)
Design and operational theory of solid state ignitions systems and computer-controlled systems including engine, braking, transmission, emission, and comfort systems. Prerequisite: AIM 245/245L. Corequisite: AIM 255L. (S)
AIM 255L Automotive Electrical Systems II Lab 1(0-2) Corequisite: AIM 255. (S)

AIM 265 Automotive Parts Management Systems 4(3-2)
A study of automotive parts service management software systems utilized by industry in distribution, inventory, basic procedures. (S)
AIM 296 Cooperative Education Placement (1-5 VAR) Supervised industrial field work. Prerequisite: freshman or sophomore standing, AIM major. (F,S)

AIM 305 Auto Customer Service Regulatory Issues 3(3-0) A study of automotive industry management theory, styles, equipment, communications and regulatory issues. Prerequisite: junior or senior standing. (F)

AIM 325 Fuels and Lubricant Production, Marketing and Conservation 3(3-0)
Petroleum industry; basic production processes, marketing techniques, alternate fuel sources, and conservation techniques. Prerequisite: junior or senior standing. (F)

AIM 335 Automotive Shop Practices 5(2-6)
Diagnosis of electrical, fuel, engine, brake and transmission systems; study of service management and service writer duties. Prerequisite: AIM 125/125L, 165/165L, 235/235L, 255/255L and junior or senior standing. (S)

AIM 345 Advanced Automotive Systems 5(3-4)
Theory and lab experience on new concepts in automotive electrical, fuel and suspension systems. Prerequisite: AIM 125/125L, 165/165L, 235/235L, 255/255L and junior or senior standing. (F)

AIM 405 Personal Selling Methods and Techniques 4(3-2) Research, preparation and presentation methods and techniques for selling in the automotive milieu. Prerequisite: junior or senior standing. (F)
AIM 425 Automotive Financial Management 5(4-2)
A study of financial management and analysis used by automotive aftermarket and original equipment businesses. Prerequisite: AIM 265, ACCTG 202 and junior or senior standing. (S)

AIM 490 Special Projects (1-5 VAR)
Individualized instruction within a special interest area, under the supervision of a department faculty member. Prerequisite: Junior or Senior standing and permission of instructor. (*) Repeatable (10)

AIM 491 Special Topics (1-5 VAR)
Prerequisite: permission of instructor. (F,S) Repeatable (10)
AIM 495 Independent Study (1-4 VAR)
Directed, independent study of topics agreed upon by the student and instructor. Prerequisite: AIM majors, junior standing, permission of instructor and department chair. (F,S,SS) Repeatable (10)

AIM 496 Cooperative Education Placement (1-5 VAR)
Supervised industrial field work. Prerequisite: junior or senior standing, AIM major. (F,S) Repeatable (10)

## ANTHROPOLOGY (ANTHR)

## UNDERGRADUATE COURSES

ANTHR 100 Cultural Anthropology 3(3-0)
Introduction to the concepts by which anthropology understands particular lifestyles, and to the constructs by which it accounts for similarities and differences among lifestyles. (*)

## ANTHR 104 Human Origins 3(3-0)

Biological nature of humans; emphasis on how forces of evolution have shaped human nature. (*)
ANTHR 106 (ENG 106) Language, Thought and Culture 3(3-0)
Cross-cultural introduction to language processes in human society. (*)

ANTHR 212 (SOC 212) The Forensics of Bones 3(3-0)
Familiarize students with the basic procedures used by forensic anthropologists to obtain evidence in criminal investigations. (*)

ANTHR 250 (SOC 250) The Sacred in Culture 3(3-0)
Concepts of the supernatural studied cross-culturally and in particular cultures. Analysis of the role of religion in helping individuals adjust to stress and aging. (*)

ANTHR 252 (SOC 252) Culture and Personality 3(3-0)
Relationship between group processes and personality factors in a cross-cultural perspective. (*)

## ANTHR 291 Special Topics (1-3 VAR) (*) Repeatable

ANTHR 301 Peoples and Cultures of the Southwest 3(3-0) Examination of the region's multiethnic and pluralistic society; emphasis on adverse adaptations to distinctive nature and cultural environments. (*)

ANTHR 310 (SOC 310) Social and Cultural Theory 3(3-0)
From classical to contemporary theory in sociology and anthropology. (*)

ANTHR 401 (SOC 401) Health, Culture and Society 3(3-0) Analysis of cultural, social, and psychological factors influencing health and health-care. (*)

ANTHR 402 (SOC 402) Aging, Culture and Society 3(3-0) Cultural, sociological, and psychological dimensions of aging. (*)

ANTHR 416 (SOC 416) Crime and the Mind 3(3-0)
Examination of crime" as an ongoing aspect of human existence. (*)
ANTHR 451 (SOC 451) Culture/Deviance/Psychopathology 3(3-0)
Analysis of the relationship between culture and the causes and manifestations of deviance and psycho-pathology. (*)

ANTHR 452 (SOC 452) Self and Society 3(3-0)
Examination of the self and society within anthropological theory. Special emphasis will be placed on symbolic interactionism and cross-cultural approaches. Prerequisite: SOC 101 and/or SOC/PSYCH 352. (*)
ANTHR 491 Special Topics (1-3 VAR) (*) Repeatable
ANTHR 492 (SOC 492) Research 3(3-0)
Qualitative and quantitative methods and designs in sociological research. (*)

## ANTHR 493 Seminar (2-4 VAR) (*)

ANTHR 494 Field Experience (3, 4, 5, 6, 12 VAR)
Practical experience in an agency setting. Prerequisite: permission of instructor. (*) Repeatable

ANTHR 495 Independent Study (1-10 VAR)
Directed study for students interested in specific areas of anthropological concern. Prerequisite: previous work in anthropology and permission of instructor. (*) Repeatable

## ART (ART)

## UNDERGRADUATE COURSES

ART 100 Visual Dynamics 3(3-0)
Appreciation and understanding of visual experiences and techniques reflecting the cultural dynamics of creativity. (F,S, SS)

ART 110 Art Career Orientation 1(1-0)
Guided development of individual job objectives. (S/U grading) (F)

ART 115 Two-Dimensional Design 3(1-4)
The foundation of visual form, emphasizing two-dimensional design and color theory. (F,SS)

## ART 116 Three-Dimensional Design 3(1-4)

The foundation of visual form, emphasizing three dimensional design. (F,S)

ART 141 Drawing I 3(1-4)
Development of perception and technical skills in rendering. ( $\mathrm{F}, \mathrm{S}$ )

## ART 211 History of Art I 3(3-0)

A survey of world art from prehistory to ca. 1300 CE. Introduces issues related to visual design, historical context, and interpretation of works of art. ( $F,{ }^{*}$ )

ART 212 History of Art II 3(3-0)
A survey of world art from ca. 1300 CE to contemporary times. Introduces issues related to visual design, historical context and interpretation of works of art. (S,*)

ART 233 Sculpture I 3(1-4)
Basic problems in sculpture relating specific concerns of visual form and process. Prerequisite: ART 116 or permission of instructor. (F,S)

ART 234 Painting I 3(1-4)
Introduction to painting in oil and acrylic where the control of space will be approached through the use of color. Prerequisite: Art core. (F,S,SS)
ART 242 Drawing II 3(1-4)
Continued development of perception and technical skills in rendering, utilizing the human figure. Detail investigation of the skeleton and muscle forms are explored. Prerequisite: ART 141. (F,SS)

ART 247 Ceramics I 3(1-4)
Essential skills in ceramic processes; emphasis on form and function as related to students' needs and creative intent. (F,S,SS)
ART 270 Printmaking I 3(0-6)
Introduction to multiple image production through traditional and non-traditional methods, including woodcut, linocut, and intaglio. Shop techniques, history and safety are also covered. Prerequisite: Art core or permission of instructor. (F,S)

ART 274 Digital Art I 3(1-4)
This course is an introduction to two-dimensional Digital Art. The student will learn to create original imagery through the use of art-oriented software. (F,S)
ART 276 Photography I 3(1-4)
Photography as an art form and as an adjunct to other art media. Prerequisite: Art core or permission of instructor. (F,S)

ART 281 Graphic Design I 3(1-4)
A basic treatment of graphic processes and techniques related to advertising design and visual communication. Prerequisite: Art core or permission of instructor. (S)

## ART 291 Special Topics (1-5 VAR)

(F,S,SS) Repeatable
ART 301 Late Twentieth-Century Aesthetics 3(3-0)
This course introduces the classic writings in ancient and modern philosophy theory and criticism informing American and European art of the late twentieth century. (SS)

ART 310 Portfolio Review 1(1-0)
Art majors must present a portfolio of their artwork or art history research prospectus for the art faculty to evaluate. Prerequisite: Art core classes. (S/U grading) (S)

## ART 311 Ancient Art 3(3-0)

A study of the visual arts of the major civilizations of the ancient Mediterranean world, including Egypt, Greece and Rome. Prerequisite: ART 211. (*)

## ART 312 Medieval Art 3(3-0)

A study of the art and architecture produced in Europe during the Middle Ages from ca. 325 to 1300 CE. Prerequisite: ART 211. (*)

## ART 313 Renaissance Art 3(3-0)

A study of art and architecture in Italy and the Netherlands from ca. 1300 to 1600 CE. Prerequisite: ART 212. (*)

## ART 314 Baroque and Rococo Art 3(3-0)

A study of art in Europe from ca. 1600 to 1785. Examines the diverse art forms in Italy, Spain, England, Holland and France. Prerequisite: ART 212. (*)

## ART 315 Nineteenth-Century Art 3(3-0)

A study of art produced during the nineteenth-century in Europe and the Americas, with emphasis on France and the United States. Prerequisite: ART 212. (*)

## ART 333 Sculpture II: Site Art 3(1-4)

Creating sculptural elements whose form and content are a response to its site and context. Prerequisite: ART 233 or permission of instructor. (F,S) Repeatable (9)

## ART 334 Painting II 3(1-4)

Techniques in oil and acrylic emphasizing the application of materials to subject matter and composition. Prerequisite: ART 234 (F,S,SS)

## ART 342 Drawing III 3(1-4)

Advanced course in pursuit of increased skills of perception and artistic anatomy. Prerequisite: ART 141, 242. (S,SS)

## ART 347 Ceramics II 3(1-4)

In-depth development of specific ceramic techniques; skills and personalization of style. Students will load and fire all the kilns as well as mix glazes. Prerequisite: ART 247 or permission of instructor. (F,S,SS) Repeatable (9)

## ART 370 Printmaking II 3(0-6)

Investigation into multiple image production through traditional and non-traditional methods emphasizing lithography, photo processes and computer imagery. Special attention given to student's interest area. Prerequisite: ART 270. (F,S)

ART 374 Digital Art II 3(1-4)
Introduction to time-based Digital Art. The student will learn the creative potential of the art of the moving image through digital video oriented software. Prerequisite: ART 274. (S)

## ART 376 Photography II 3(1-4)

Photography as an art form and an adjunct to other art media. Prerequisite: ART 276. (F)

ART 381 Graphic Design II 3(1-4)
Intermediate graphic design techniques including typography, pre-press and client relations. Prerequisite: ART 281 or permission of instructor. (F)

ART 382 Illustration 2(0-4)
Images rendered in varying techniques to express ideas related to commercial application. Prerequisite: ART 381 or permission of instructor. (F,S,SS)

## ART 383 Exhibition Design 2(0-4)

Communication and design principles applied to the display of objects. Special attention to museum and gallery installations. Prerequisite: permission of instructor. (F,S,SS)

## ART 397 Studio Series (1-3 VAR)

Advanced studio offerings for students who have completed all other course offerings in a specific discipline. Scheduled concurrently with lower-division studios. Prerequisite: permission of instructor. (F,S,SS) Repeatable (9)

## ART 410 Senior Career Orientation 1(1-0)

Formal presentation of student's portfolio or art history research to the art faculty. Senior exhibition, artist's statement, resumes and job placement interviews. Prerequisite: senior standing. (S/U grading) (S)

ART 411 Twentieth-Century Art 3(3-0)
A survey of major developments in the visual arts, art theory, and criticism during the twentieth century. Prerequisite: ART 212. (F)

## ART 412 Contemporary Art (1-3 VAR)

A study of selected recent developments in the visual arts. Reading, viewing, and discussion of new developments in media, art theory and criticism. Prerequisite: ART 411. (*)

ART 413 Native American Art 3(3-0)
A study of art and visual design in Native North American cultures from prehistory to contemporary times. Prerequisite: ART 212. (*)

ART 414 Asian Art 3(3-0)
A survey of art from major cultures of Asia and the Far East from ancient to contemporary times. Prerequisite: ART 211. (*)
ART 415 Latin American Art 3(3-0)
A survey of art of Latin America from ancient to the contemporary times. Includes Chicano art. Prerequisite: ART 212. (*)

ART 433 Advanced Site Art 3(1-4)
Advanced projects in Site Art that involve the presentation and creation of site specific sculptural forms. Prerequisite: ART 333 or permission of instructor. (F,S) Repeatable (9)

ART 434 Painting III 3(1-4)
Advanced painting with an emphasis on individual development. Focus pertains to formal, pictorial and technical problems met in developed personal imagery. Prerequisite: ART 334. (F,S,SS) Repeatable (9)

ART 442 Drawing IV 3(1-4)
Emphasis on development of individual skills of perception and exploration of new techniques and materials. May be repeated twice. Prerequisite: ART 342. (S) Repeatable

ART 447 Advanced Ceramics/ Kiln Construction 3(1-4)
This course explores advanced theories and techniques involved in working with clay: forming, firing, glazing, kiln design and construction. Prerequisite: ART 347 or permission of instructor. (F,S,SS) Repeatable (9)

ART 470 Printmaking III 3(0-6)
Advanced investigation into multiple image production through individual techniques and interest. Prerequisite: ART 370. (F,S) Repeatable (9)

## ART 474 Digital Art III 3(1-4)

In this course the student will learn to further develop the potential of Digital Art through the exploration of internet art, video and sound art. Prerequisite: ART 374. (S) Repeatable (9)

ART 476 Photography III 3(1-4)
Students are encouraged to pursue specific areas of interest, and advance their personal imagery while continuing study of postmodern themes in contemporary photography. Prerequisite: ART 376. (F) Repeatable (9)

## ART 481 Advanced Graphic Design I 3(1-4)

Using advanced principles, this workshop operates as a professional studio with designers, an art director, production manager, copywriter, computer manager, etc., producing posters, logos and brochures. Prerequisite: ART 281, 381 or permission of instructor. (S) Repeatable (9)

ART 491 Special Topics (1-5 VAR) (F,S,SS) Repeatable

## ART 494 Field Experience (1-5 VAR)

Off-campus individual experience providing transition from classroom instruction to on-the-job experience. Prerequisite: senior standing and permission of instructor. (F,S,SS)

## ART 495 Independent Study (1-5 VAR)

Individual tutorial experience. Prerequisite: junior or senior standing and permission of instructor. ( $F, S, S S$ )

ART 496 Cooperative Education Placement (1-4 VAR)
Prerequisite: permission of instructor. (F,S,SS)
ART 497 Studio Series (1-3 VAR)
Advanced sections of studio offerings. Prerequisite: ART 397 or permission of instructor. (F,S,SS) Repeatable

## GRADUATE COURSES

## ART 500 Workshop (1-5 VAR)

Using materials and techniques based on advanced concepts and ideas. Prerequisite: permission of instructor and graduate standing. ( $F, S, S S$ ) Repeatable

## ART 511 Twentieth-Century Art (1-3 VAR)

Graduate study of artists, their biographies and art, politics and culture, from the middle of the nineteenth through the end of the twentieth century. Prerequisite: permission of instructor. (F,S,SS) Repeatable

## ART 512 Contemporary Art 3(3-0)

Advanced study in contemporary art and associated criticism, aesthetics and the philosophy of art through the end of the twentieth century. Prerequisite: ART 212 or permission of instructor. (*)

## ART 533 Graduate Level Sculpture/Public Art 3(0-6)

Graduate level work in sculpture/public art including explorations in content, context, critique and techniques. Prerequisite: three semesters of undergraduate sculpture or permission of instructor. (F,S) Repeatable

## ART 542 Graduate Drawing 3(1-4)

Professional drawing practices utilizing quality papers and display presentation. Prerequisite: ART 412. ( ${ }^{*}$ )

## ART 547 Ceramics (1-3 VAR)

Graduate level work in clay including explorations in ceramic content, context, critique and techniques (forming, firing and glazing). Prerequisite: three semesters of undergraduate ceramics or permission of instructor. (F,S,SS) Repeatable

ART 570 Graduate Printmaking 3(0-6)
Graduate students will develop their personal, creative approach to image making through innovative exploration of relief, intaglio or lithography. Prerequisite: ART 470. (*)

ART 591 Special Topics (1-3 VAR)
Prerequisite: permission of instructor and graduate standing. (F,S,SS) Repeatable
ART 597 Studio Series (1-3 VAR)
Graduate level studies. Prerequisite: permission of instructor. (F,S,SS) Repeatable

## ATHLETIC TRAINING (AT)

## UNDERGRADUATE COURSES

## AT 101 Introduction to Athletic Training 2(2-0)

Introduction to the profession and overview of the fundamentals of athletic training. (F,S)

AT 232 First Aid 2(1-1)
Knowledge and skills in current first-aid and CPR procedures for the Lay Responder. Red Cross certification. (F,S,SS)

AT 233 CPR/AED for the Professional Rescuer 1(1-1)
CPR/AED training for the Professional Rescuer. Also, covers other emergency care skills used by athletic trainers. Prerequisite: AT 232. (F,S,SS)

AT 260 Care and Prevention of Athletic Injuries 3(2-2)
Procedures in the prevention, care and treatment of injuries sustained during activity and athletic participation. (F,S)

AT 279 Practicum in Athletic Training I 2(0-4)
Instruction, practice and evaluation of assigned NATA psychomotor competencies and clinical proficiencies. Prerequisite: AT 232 and AT 260. ( $\mathrm{F}, \mathrm{S}$ )
AT 291 Special Topics (1-5 VAR) (F,S) Repeatable
AT 323 Functional Exercise Training 2(1-2)
Course applications include exercise program design, aspects of functional training, and components of various types of exercise regimens as related to injury prevention and recovery. Prerequisite: EXHP 364. (S)
AT 330 Lower Extremity Evaluation 3(2-2)
An in-depth study of assessment techniques and protocols applicable to injuries to the lower extremities. Prerequisite: AT 279, BIOL 223, 223L and approval of program director. (F)

AT 331 Upper Extremity Evaluation 3(2-2)
An in-depth study of assessment techniques and protocols applicable to injuries to the upper extremities. Prerequisite: AT 279, BIOL 223, 223L and approval of program director. (S)

AT 332 Head, Neck, and Spine Evaluation 3(2-2)
An in-depth study of assessment techniques and protocols applicable to injuries to the head, neck and spine. Prerequisite: AT 331 and approval of program director. (F)

AT 339 Clinical Pathology and Assessment 3(2-2)
Study of differential signs and symptoms produced by systemic diseases affecting physical activity in individuals to enable the athletic trainer in making sound clinical decisions. Prerequisite: AT 332 or approval of program director. (S)

AT 379 Practicum in Athletic Training II 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: AT 279 and acceptance into clinical portion of program. (F)

AT 389 Practicum in Athletic Training III 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: AT 379. (S)

AT 400 Workshop (1-5 VAR)
Learning experiences in athletic training offered n large block of time not corresponding to the weekly meeting times of the regular course offerings. Prerequisite: approval of the program director. (*) Repeatable

AT 419 Athletic Training Field Experience (1-5 VAR)
Learning experiences to be conducted in an actual athletic training or related environment and supervised by an approved Athletic Training clinical instructor (ACI). Prerequisite: acceptance into clinical portion of program. Corequisite: one of the following courses: AT 379, 389, 479, 489. (F,S,SS) Repeatable

## AT 430 Therapeutic Modalities 3(2-2)

Study of theories and application of modalities used in the athletic training setting for the treatment of injuries. Prerequisite: AT 279 and approval of program director. (F)
AT 431 Therapeutic Exercise 3(2-2)
Study of current rehabilitation theories and application in the athletic training setting. Prerequisite: AT 430. (F)

AT 443 Administration in Athletic Training 3(3-0)
An examination of current topics in athletic training including legal liability, athletic training administration issues, and budgetary concerns. Prerequisite: approval by program director. (S)
AT 479 Practicum in Athletic Training IV 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: AT 389. (F)

AT 488 BOC Test Prep 1(0-2)
Instruction, practice, evaluation and application of the Clinical Proficiencies and education competencies of NATA. Prerequisite: AT 479. Corequisite: AT 489 (S)

AT 489 Practicum in Athletic Training V 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: AT 479. (S)
AT 491 Special Topics (1-5 VAR)
Prerequisite: permission of program director. (*) Repeatable
AT 494 Field Experience (1-5 VAR)
Learning experience to be conducted in athletic training related clinical environment and supervised by the athletic training education program. Prerequisite: approval of program director. (S/U grading) (*) Repeatable

AT 495 Independent Study (1-5 VAR)
Prerequisite: approval of program director. (S/U grading) (*) Repeatable

## BILINGUAL BICULTURAL EDUCATION (BBE) UNDERGRADUATE COURSES

## BBE 400 Workshop (1-3 VAR)

Development of classroom materials and curriculum in bilingual education. (*) Repeatable

BBE 401 Teaching English Language Learners 3(3-0)
Methods and techniques of teaching English to children of linguistically diverse backgrounds; K-6 and 7-12 focus. Field experience required. Prerequisite: admission to Teacher Education Program. (SS)

BBE 403 Content Instruction for EL Learners 3(3-0)
Methods and techniques for teaching content area subjects to students of linguistically different backgrounds; K-6 and 7-12 focus. Field experience required. Prerequisite: admission to Education. (F)
BBE 420 Literacy for EL Learners 3(3-0)
Methods and techniques of teaching Literacy to K-12 English Language Learners. Field experience required. Prerequisite: admission to Education, RDG 410/RDG 435 or a beginning course in reading. (SS)

BBE 460 ELL Assessment \& Administration 3(3-0)
Study of state, federal, and local laws and policies concerning ELL programs; language proficiency instruments used by teachers for assessment and placement of Ells. Prerequisite: admission to Education (SS)

BBE 481 Practicum with English Learners (1-6 VAR)
Supervised practicum and seminar. Prerequisite: admission to Education or graduate standing. (F,S,SS) Repeatable

BBE 495 Independent Study (1-2 VAR)
For the student specializing in bilingual education. (F,S) Repeatable

## GRADUATE COURSES

BBE 500 Workshop (1-3 VAR)
Practical in development of classroom materials/ curriculum in bilingual education. Prerequisite: graduate standing. (*) Repeatable

BBE 501 Teaching English Language Learners 3(3-0)
Methods and techniques of teaching English to children of linguistically diverse backgrounds; K-6 and 7-12 focus. Field experience required. Prerequisite: admission to Education, graduate standing. (SS)

BBE 503 Content Instruction for EL Learners 3(3-0)
Methods and techniques for teaching content area subjects to students of linguistically different backgrounds; K-6 and 7-12 focus. Field experience required. Prerequisite: admission to Education, graduate standing. (F)

BBE 520 Literacy for EL Learners 3(3-0)
Methods and techniques of teaching Literacy to K-12 English Language Learners. Field experience required. Prerequisite: admission to Education, graduate standing, RDG 410/RDG 435 or a beginning course in reading. (SS)
BBE 541 Survey of Research in Bilingual Education 2(2-0) Prerequisite: graduate standing. (*)

BBE 560 ELL Assessment \& Administration 3(3-0)
Study of state, federal, and local laws and policies concerning ELL programs; language proficiency instruments used by teachers for assessment and placement of ELLs. Prerequisite: admission to Education, graduate standing. (SS)

BBE 581 Practicum with English Learners (1-6 VAR)
Supervised practicum and seminar. Prerequisite: admission to
Education or graduate standing. (F,S,SS) Repeatable
BBE 595 Independent Study (1-2 VAR)
For the student specializing in bilingual education. Prerequisite: graduate standing. (*) Repeatable

## BIOLOGY (BIOL)

## UNDERGRADUATE COURSES

BIOL 100 Principles of Biology 3(3-0)
Introduction to basic principles common to all facets of biology. Topics include a brief history of biology, the scientific method, the diversity of life, cell structure and reproduction, and metabolism. Corequisite: BIOL 100L. (F,S)

BIOL 100L Principles of Biology Lab 1(0-2)
To expose the student to problem-solving skills emphasizing the importance of observation and data accumulation. Corequisite: BIOL 100. (F,S)

BIOL 112 Nutrition 3(3-0)
Analysis of personal dietary habits and behavior in relation to basic human nutritional needs and food composition. (F,S)
BIOL 121 Environmental Conservation 3(3-0)
Historical review of humankind's interrelationship with and impact on the natural environment. Basic principles of ecology and current issues relating to the use of natural resources and environmental problems. Corequisite: BIOL 121L. (F,S,SS)

BIOL 121L Environmental Conservation Lab 1(0-2)
Field studies to accompany BIOL 121. Corequisite: BIOL 121. (F,S,SS)

BIOL 171 Career Planning I 1(1-0)
Identifying career options and creating a personalized educational program. (F,S)

BIOL 181 College Biology I/Organismal Bio 3(3-0)
Biological diversity and structure-function relationships, evolution and ecology. Prerequisite: one year each of high school algebra, biology, and chemistry or MATH 099, BIOL 100/L and CHEM 111/L. Corequisite: BIOL 181L. (F,S)
BIOL 181L College Biology I/Organismal Bio Lab 1(0-2) Corequisite: BIOL 181. (F,S)

BIOL 182 College Biology II/Cellular Biology 3(3-0)
Continuation of BIOL 181. Basic cell structure and function, reproduction and heredity. Prerequisites: BIOL 181/181L and CHEM 121/121L. Corequisite: BIOL 182L. (F,S)
BIOL 182L College Biology II/Cellular Bio Lab 1(0-2) Prerequisite: BIOL 181/181L and CHEM 121/121L. Corequisite: BIOL 182. (F,S)

BIOL 183 College Biology I Recitation 1(1-0)
Critical thinking for College Biology I topics. Corequisite: BIOL 181. (S/U grading) (F,S)

BIOL 184 College Biology II Recitation 1(1-0)
Critical thinking for College Biology II topics. Corequisite: BIOL 182. (S/U grading) (F,S)

BIOL 201 Botany 2(2-0)
Forms, basic structures, relationships, life histories and evolutionary trends of representatives of the major autotrophic plant groups. Prerequisite: BIOL 181/181L and BIOL 182/182L. Corequisite: BIOL 201L. (S)

BIOL 201L Botany Laboratory 2(0-4)
Prerequisite: BIOL 181/181L and BIOL 182/182L. Corequisite: BIOL 201. (S)
BIOL 202 Zoology 2(2-0)
Study of structure, function, evolution, biodiversity, behavior, and ecology of vertebrates and invertebrates, including protozoans and human parasites. Prerequisite: BIOL 181/181L and BIOL 182/182L. Corequisite: BIOL 202L. (F)
BIOL 202L Zoology Laboratory 2(0-4)
Prerequisite: BIOL 181/181L and BIOL 182/182L. Corequisite: BIOL 202. (F)

BIOL 203 Zoology Recitation 1(1-0)
Recitation to accompany BIOL 202. Corequisite: BIOL 202 and 202L. (S/U grading) (F)
BIOL 206 Introduction to Microbiology 3(3-0)
For students of nursing and allied health. Applied aspects of medical microbiology. Prerequisite: one year of high school biology or BIOL 100/L; and one year of high school chemistry or CHEM 111/L. Corequisite: BIOL 206L. (F)
BIOL 206L Introduction to Microbiology Lab 1(0-3)
Corequisite: BIOL 206. (F)
BIOL 220 Medical Terminology 2(2-0)
Basic prefixes, word roots, combining forms and suffixes of medical terminology and human anatomy are covered, including pronunciation and patient charting. (S)
BIOL 223 Human Physiology and Anatomy I 3(3-0)
Study of human physiology and anatomy designed for students who require or desire a thorough understanding of the functional and structural aspects of the human body. Not for the majority of biology majors except Teacher Education. Topics include body orientation, physiologically important molecules, the cell, tissues, integument, skeleton, muscle, nervous system, and special senses. Prerequisite: one year of high school biology or BIOL 100/100L; and one year of high school chemistry or CHEM 111/111L. Corequisite: BIOL 223 L. (F,S)

BIOL 223L Human Physiology and Anatomy I Lab 1(0-2) Corequisite: BIOL 223. (F,S)

BIOL 224 Human Physiology and Anatomy II 3(3-0)
A continuation of BIOL 223. Students are permitted to enter the course before completing BIOL 223. Topics include endocrines, respiration, digestion, metabolism, excretion, fluid-electrolyte balance, cardiovascular, and reproduction. Prerequisite: BIOL 223/223L. Corequisite: BIOL 224L. (F,S)

BIOL 224L Human Physiology and Anatomy II Lab 1(0-2) Corequisite: BIOL 224. (F,S)

BIOL 291 Special Topics (1-4 VAR) (F,S,SS) Repeatable
BIOL 292 Research (1-3 VAR)
Faculty directed research project for undergraduate student. May be repeated for a maximum of 3 credits, total. Prerequisite: approval of department chair. (F,S,SS) Repeatable (3)

## BIOL 294 Field Experience (1-4 VAR)

Volunteer work experience under program director, department coordinator and faculty supervisor. (S/U grading) F,S,SS) Repeatable

BIOL 301 General Microbiology 3(3-0)
Introduction to the bacteria and viruses, including microbial genetics and physiology. Prerequisite: BIOL 181/181L and BIOL 182/182L, and CHEM 301/301L. CHEM 302/302L and MATH 221 are strongly recommended. Corequisite: BIOL 301L. (F)

## BIOL 301L General Microbiology Lab 2(0-4)

Corequisite: BIOL 301. (F)
BIOL 302 Medical Microbiology 2(2-0)
Survey of pathogenic bacteria, viruses and fungi Prerequisite: BIOL 301 or permission of the instructor. Corequisite: BIOL 302L. (S,O)

## BIOL 302L Medical Microbiology Lab 2(0-4)

Corequisite: BIOL 302. (S, O)
BIOL 321 Comparative Vertebrate Anatomy 3(3-0)
Comparative study of developmental and functional anatomy of vertebrate animals. Prerequisite: BIOL 181/181L, BIOL 182/182L and BIOL 202/L; or permission of instructor. Corequisite: BIOL 321L. (S)
BIOL 321L Comparative Vertebrate Anatomy Lab 2(0-4) Corequisite: BIOL 321. (S)
BIOL 350 Mendelian and Population Genetics 2(2-0) Survey of basic Mendelian genetics, genetic mapping and population genetics. Prerequisite: BIOL 181/181L, BIOL 182/182L, and MATH 121. Also strongly recommended MATH 156. (F,S)

BIOL 351 Molecular Biology and Genetics 2(2-0)
Study of the molecular flow of genetic information, gene regulation and cancer genetics. Prerequisite: BIOL 181/181L and BIOL 182/182L; and either BIOL 301 or BIOL 350; and CHEM 121/121L and CHEM 122/122L. (F,S)

BIOL 351L Advanced Genetics and Molecular Biology Laboratory 2(0-4)
Molecular biology investigations of gene regulation and recombinant DNA. Prerequisite: BIOL 350 and CHEM 121/121L and CHEM 122/122L. Corequisite: BIOL 351. (S)

BIOL 352 Evolutionary Biology and Ecology 3(3-0)
Historical view of the theory of evolution with emphasis on the relationship between organisms and the environment, and the mechanisms and forces that produce evolutionary change. Prerequisite: BIOL 181/181L and BIOL 182/182L; and either BIOL 201 or BIOL 202. BIOL 350 recommended. (F,S)

BIOL 378 Laboratory in Teaching Biology 1(0-2)
Laboratory preparation, safety, instruction and methods under the guidance and supervision on an instructor. Prerequisite: approval of instructor. (F,S) Repeatable

BIOL 392 Research (1-3 VAR)
Faculty directed research project for undergraduate student. May be repeated for a maximum of 3 credits, total. Prerequisite: approval of department chair. (F,S,SS) Repeatable (3)

## BIOL 394 Field Experience (1-4 VAR)

Volunteer work experience under program director, program coordinator, and faculty supervisor (S/U grading) (F,S,SS) Repeatable

BIOL 402 Immunology 3(3-0)
Humoral and cell-mediated immunity including immune disorders and theories of immunological techniques. Prerequisite: BIOL 301/301L. (S)

BIOL 403 Virology 2(2-0)
Molecular aspects of viral infection of bacteria, plants, and animals including viral replication, host range, host defenses, antiviral drugs, and viral ecology. Prerequisite: BIOL 301 and 301L, or BIOL 351. (F,E)

## BIOL 412 Cellular Biology 3(3-0)

Structural and functional organization of the cell, life cycles of cells, intracellular digestion, protein synthesis and cell death. Prerequisite: CHEM 301/301L and either BIOL 301/301L or both BIOL 350 and 351. CHEM 302/302L is strongly recommended. Corequisite: BIOL 412L. (S)

BIOL 412L Cellular Biology Lab 1(0-3)
Corequisite: BIOL 412. (S)
BIOL 413 Plant Physiology 2(2-0)
Thorough examination of general physiology and function of plant body systems. Prerequisite: BIOL 201/201L and CHEM 301/301L. Corequisite: BIOL 413L. (S,O)

BIOL 413L Plant Physiology Lab 2(0-4)
Prerequisite: BIOL 191/191L, 192/192L, and CHEM 301/301L. Corequisite: BIOL 413. (S,O)

BIOL 414 Vertebrate Physiology 3(3-0)
General physiology and the functions of animal and human body systems. Prerequisite: BIOL 202 and CHEM 301/301L. CHEM 302/302L and MATH 156 are strongly recommended. Corequisite: BIOL 414L. (F)

BIOL 414L Vertebrate Physiology Lab 1(0-2)
Corequisite: BIOL 414. (F)
BIOL 421 Histology 2(2-0)
A microscopic study of vertebrate tissues and organs. Prerequisite: BIOL 202/202L and CHEM 122/122L, or permission of instructor. Corequisite: BIOL 421L. (S,O)

BIOL 421L Histology Lab 2(0-4)
Corequisite: BIOL 421. (S,O)
BIOL 432 Developmental Biology 2(2-0)
Theory and principles of the development of representative vertebrate and invertebrate animals, with particular emphasis on the frog, chick, and Drosophila. Prerequisite: BIOL 202/202L and BIOL 350 and BIOL 351; or permission of instructor. Corequisite: 432L. (S,E)

BIOL 432L Developmental Biology Lab 2(0-4)
Corequisite: BIOL 432. (S/E)
BIOL 440 Molecular Genetics 2(2-0)
Molecular and Biochemical basis of heredity. Regulation of gene expression. Prerequisite: BIOL 351 or permission of instructor. Corequisite: BIOL 440L. (S)

BIOL 440L Molecular Genetics Lab 1(0-2)
Corequisite: BIOL 440 (S)
BIOL 441 Freshwater Invertebrate Zoology 2(2-0) Classification, phylogeny, systematics, morphology, physiology, and natural history of freshwater invertebrates inclusive of insects. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 441L. (S,O)

BIOL 441L Freshwater Invertebrate Zoology Lab 2(0-4) Corequisite: BIOL 441. (S, O)

BIOL 443 Limnology 2(2-0)
Biology, chemistry and physics of lakes and rivers. Prerequisite: BIOL 201/201L and BIOL 202/202L or permission of instructor. Corequisite: BIOL 443L. (S,E)
BIOL 443L Limnology Lab 2(0-4)
Corequisite: BIOL 443 (S,E)
BIOL 450 Survey of Genomics and Bioinformatics 2(2-0) Theory and practice of genome analysis including use of statistics, databases and biomolecular sequence analysis software. Prerequisite: BIOL 351, and MATH 156 or MATH 356, or permission of instructor. Corequisite: BIOL 450L. ( $\mathrm{F}, \mathrm{O}$ )

BIOL 450L Survey of Genomics and Bioinformatics Lab 1(0-2)
Prerequisite: BIOL 351, and MATH 156 or MATH 356. Corequisite: BIOL 450. (F,O)

BIOL 452 Advanced Microscopy 2(2-0)
Theory and application of microscopy to the biological sciences. Includes preparation of cells and tissues for examination, scope, operation, and image analysis. Prerequisite: BIOL 301/301L or permission of instructor. Corequisite: BIOL 452L. (F,E)
BIOL 452L Advanced Microscopy Lab 2(0-4)
Corequisite: BIOL 452. (F,E)
BIOL 453 Ecology 2(2-0)
Interrelationships among organisms and their environment, employing quantitative methods and conceptual models. Prerequisite: BIOL 352 and MATH 126 or MATH 221, or permission of instructor. Corequisite: BIOL 453L. (F,E)

BIOL 453L Ecology Field Studies 2(0-4)
Corequisite: BIOL 453. (F,E)

## BIOL 461 Applied Geospatial Technology (GIS/GPS)

 3(3-0)Theory and practice of using Geographic Information Systems (GIS) and Global Positioning Systems (GPS) for geographic data analysis, and to georeference data. ( $F, O$ )

BIOL 462 Environmental Management 3(3-0)
Scientific basis of environmental regulations applied to air/water quality, solid waste, and hazardous waste; technologies and procedures used by generators to achieve compliance. Prerequisite: BIOL 352 or junior standing. (S, O)

BIOL 465 Environmental Toxicology 3(3-0)
Basic principles of toxicology, interaction of xenobiotics with living organisms and the environment, and the impact of pollutants on the ecosystem. Prerequisite: BIOL 181/181L and BIOL 182/182L and CHEM 302/302L, or permission of instructor. (F,E)

BIOL 473 Med. Tech. Clinical Rotation I 12(5-14)
Coursework and clinical training in an affiliated medical laboratory sciences facility. Specific course of study determined by facility. Prerequisite: consent of instructor. (*)

BIOL 474 Med. Tech. Clinical Rotation II 12(5-14)
Coursework and clinical training in an affiliated medical laboratory sciences facility. Specific course of study determined by facility. Prerequisite: BIOL 473 and consent of instructor. (*)

BIOL 475 Med. Tech. Clinical Rotation III 6(3-6)
Coursework and clinical training in an affiliated medical laboratory sciences facility. Specific course of study determined by facility. Prerequisite: BIOL 474 and consent of instructor. (*)

BIOL 479 Ichthyology 2(2-0)
The morphology, taxonomy and ecology of fishes; an introduction to fishery biology and aquaculture. Field trips are an integral part of the course. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 479L. (F,O)

BIOL 479L Ichthyology Lab 1(0-2)
Corequisite: BIOL 479. (F,O)
BIOL 481 Entomology 2(2-0)
Evolutionary biology and management of insects. Impact of arthropods on the balance of nature. Medical and veterinary entomology. Arthropods as vectors of human and animal diseases. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 481L. or permission of instructor. ( $\mathrm{F}, \mathrm{O}$ )

BIOL 481L Entomology Lab 1(0-2)
Corequisite: BIOL 481. (F,O)
BIOL 483 Mammalogy 2(2-0)
Evolution, classification and biology of mammals; practice in identifying and preparing specimens. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 483L. (S,E)
BIOL 483L Mammalogy Lab 1(0-2)
Corequisite: BIOL 483. (S,E)
BIOL 484 Ornithology 2(2-0)
Classification, life history, laboratory and field identification of birds. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 484L. (S, O)

BIOL 484L Ornithology Lab 1(0-2)
Corequisite: BIOL 484. (S, O)

## BIOL 485 Plant Taxonomy 2(2-0)

Identification of the common vascular plant families of Colorado with an emphasis on the flowering plants; study of their systematic relationships. Prerequisite: BIOL 201/201L or permission of instructor. Corequisite: BIOL 485L. (F)

BIOL 485L Plant Taxonomy Lab 2(0-4)
Corequisite: BIOL 485. (F)
BIOL 486 Field Botany 3(3-0)
Principles and applications of field techniques used in vegetation assessment, surveys, and vegetation monitoring. Prerequisite: BIOL 201/201L. (*)

BIOL 491 Special Topics (1-4 VAR) (F,S,SS) Repeatable
BIOL 492 Research (1-3 VAR)
Faculty directed research project for undergraduate student. May be repeated for a maximum of 3 credits, total. Prerequisite: approval of department chair. (F,S,SS) Repeatable (3)

BIOL 493 Seminar 1(1-0)
Seminar for majors and minors concerning unique, current, or unusual topics in biology. Speakers may include guests, faculty, or students. Required of majors. Prerequisite: senior standing and completion of all biology core courses. (F,S)

## BIOL 494 Field Experience (1-4 VAR)

Volunteer work experience under program director, program coordinator and faculty supervisor. (S/U grading). (F,S,SS) Repeatable

## BIOL 495 Independent Study (1-4 VAR)

Prerequisite: junior standing, biology major, permission of instructor and department. (F,S,SS) Repeatable

BIOL 498 Internship (5-15 VAR)
Work experience in the Biology discipline under the combined supervision of the selected organization and a faculty member. Prerequisite: permission of department chair. (S/U grading) (F,S,SS) Repeatable

## GRADUATE COURSES

BIOL 502 Immunology 3(3-0)
Humoral and cell-mediated immunity including immune disorders and theories of immunological techniques. (S)
BIOL 503 Virology 2(2-0)
Molecular aspects of viral infection of bacteria, plants, and animals including viral replication, host range, host defenses, antiviral drugs, and viral ecology. Prerequisite: BIOL 301/301L or BIOL 351 or permission of instructor. (F,E)

BIOL 510 Foundations in Graduate Studies 3(3-0)
Laboratory safety. Effective sourcing, use, and interpretation of the literature. Scientific methodology, writing, and review of research ethics. Development of a thesis or internship plan. Prerequisite: graduate standing. (F)

BIOL 512 Cellular Biology 3(3-0)
Structural and functional organization of the cell, life cycles of cells, intracellular digestion, protein synthesis and cell death. Prerequisite: CHEM 301/301L and either BIOL 301/301L or both BIOL 350 and 351. CHEM 302/302L is strongly recommended. Corequisite: BIOL 512L. (S)
BIOL 512L Cellular Biology Lab 1(0-3)
Corequisite: BIOL 512 (S)
BIOL 513 Plant Physiology 2(2-0)
Thorough examination of general physiology and function of plant body systems. Prerequisite: BIOL 191/191L, 192/192L, and CHEM 301/301L. Corequisite: BIOL 513L. (S,O)

BIOL 513L Plant Physiology Lab 2(0-4)
Prerequisite: BIOL 191/191L, 192/192L, and CHEM 301/301L. Corequisite: BIOL 513. (S, O)

BIOL 521 Histology 2(2-0)
A microscopic study of vertebrate tissues and organs. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 521L. (S,O)
BIOL 521L Histology Lab 2(0-4)
Corequisite: BIOL 521. (S,O)
BIOL 532 Developmental Biology 2(2-0)
Theory and principles of the development of representative vertebrate and invertebrate animals, with particular emphasis on the frog, chick, and Drosophila. Prerequisite: BIOL 202/202L and BIOL 350 and BIOL 351; or permission of instructor. Corequisite: BIOL 532L. (S,E)

BIOL 532L Developmental Biology Lab 2(0-4)
Corequisite: BIOL 532. (S, E)
BIOL 540 Molecular Genetics 2(2-0)
Molecular and biochemical basis of heredity. Regulation of gene expression. Prerequisite: BIOL 351 and 351 L or permission of instructor. Corequisite: BIOL 540L. (S)

BIOL 540L Molecular Genetics Lab 1(0-2)
Corequisite: BIOL 540. (S)

BIOL 541 Freshwater Invertebrate Zoology 2(2-0)
Classification, phylogeny, systematics, morphology, physiology, and natural history of freshwater invertebrates inclusive of insects. Corequisite: BIOL 541L. (S,O)

BIOL 541L Freshwater Invertebrate Zoology Lab 2(0-4)
Corequisite: BIOL 541. (S, O)
BIOL 543 Limnology 2(2-0)
Biology, chemistry, and physics of lakes and rivers. Corequisite: BIOL 543L. (S, E)

BIOL 543L Limnology Lab 2(0-4)
Corequisite: BIOL 543. (S,E)
BIOL 550 Survey of Genomics and Bioinformatics 2(2-0) Theory and practice of genome analysis including use of statistics, databases and biomolecular sequence analysis software. Prerequisite: BIOL 351, and MATH 156 or MATH 356 or MATH 550, or permission of instructor. (F,O)

BIOL 550L Survey of Genomics and Bioinformatics Lab 1(0-2)
Prerequisite: BIOL 351, and MATH 156 or MATH 356. Corequisite: BIOL 550. (F,O)

BIOL 552 Advanced Microscopy 2(2-0)
Theory and application of microscopy to the biological sciences. Includes preparation of cells and tissues for examination, scope operation, and image analysis. Corequisite: BIOL 552L. (F,E)

BIOL 552L Advanced Microscopy Lab 2(0-4)
Corequisite: BIOL 552. (F,E)

## BIOL 553 Ecology 2(2-0)

Interrelationships among organisms and their environment, employing quantitative methods and conceptual models. Prerequisite: BIOL 352, and MATH 126 or MATH 221, or permission of instructor. Corequisite: BIOL 553L. (F,E)
BIOL 553L Ecology Field Studies 2(0-4)
Corequisite: BIOL 553. (F/E)
BIOL 561 Applied Geospatial Technology (GIS/GPS) 3(3-0) Theory and practice of using Geographic Information Systems (GIS) and Global Positioning Systems (GPS) for geographic data analysis, and to georeference data. (F,O)

BIOL 562 Environmental Management 3(3-0)
Scientific basis of environmental regulations applied to air/water quality, solid waste, and hazardous waste; technologies and procedures used by generators to achieve compliance. Prerequisite: BIOL 352 or graduate standing. (S,O)

## BIOL 565 Environmental Toxicology 3(3-0)

Basic principles of toxicology, interaction of the xenobiotics with living organisms and the environment, and the impact of pollutants on the ecosystem. Prerequisite: BIOL 181/181L and BIOL 182/182L and CHEM 302/302L, or permission of instructor. (F,E)

BIOL 578 Practicum in Laboratory Instruction 1(0-2)
Laboratory preparation, instruction, and methods under the guidance and supervision of a professor. May be repeated for a maximum of 4 credits. Prerequisite: graduate standing or permission of department chair. (S/U grading) (F,S) Repeatable (4)

BIOL 579 Ichthyology 2(2-0)
The morphology, taxonomy and ecology of fishes; an introduction to fishery biology and aquaculture. Field trips are an integral part of the course. Corequisite: BIOL 579L. (F,O)
BIOL 579L Ichthyology Lab 1(0-2)
Corequisite: BIOL 579. (F,O)

## BIOL 581 Entomology 2(2-0)

Evolutionary biology and management of insects. Impact of arthropods on the balance of nature. Medical and veterinary entomology. Arthropods as vectors of human and animal diseases. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 581L or permission of instructor. ( $\mathrm{F}, \mathrm{O}$ )
BIOL 581L Entomology Lab 1(0-2)
Corequisite: BIOL 581. (F,O)
BIOL 583 Mammalogy 2(2-0)
Evolution, classification and biology of mammals; practice in identifying and preparing specimens. Corequisite: BIOL 583L. (S,E)

BIOL 583L Mammalogy Lab 1(0-2)
Corequisite: BIOL 583 (S,E)
BIOL 584 Ornithology 2(2-0)
Classification, life history, laboratory and field identification of birds. Corequisite: BIOL 584L. $(\mathrm{S}, \mathrm{O})$

BIOL 584L Ornithology Lab 1(0-2)
Corequisite: BIOL 584. (S, O)
BIOL 585 Plant Taxonomy 2(2-0)
Identification of common vascular plant families of Colorado with an emphasis on the flowering plants; study of their systematic relationships. Corequisite: BIOL 585L. (F)

BIOL 585L Plant Taxonomy Lab 2(0-4)
Corequisite: BIOL 585. (F)
BIOL 586 Field Botany 3(3-0)
Principles and applications of field techniques used in vegetation assessment, surveys, and vegetation monitoring. Prerequisite: graduate standing. (*)
BIOL 588 Internship Seminar 1(1-0)
Graduate internship presentation and examination for completion of MS degree option within the Graduate Programs in Natural Sciences. Prerequisite: graduate standing. ( $\mathrm{F}, \mathrm{S}, \mathrm{SS}$ )

BIOL 589 Thesis Defense 1(1-0)
Thesis presentation for completion of MS degree option within the Graduate Programs in Natural Sciences. Prerequisite: graduate standing. ( $\mathrm{F}, \mathrm{S}, \mathrm{SS}$ )
BIOL 591 Special Topics (1-4 VAR) (F,S,SS) Repeatable
BIOL 592 Research (1-6 VAR)
Faculty directed research project for graduate students. Prerequisite: graduate standing and approval of department chair or program director. (S/U grading) (F,S,SS) Repeatable

BIOL 593 Seminar 1(1-0)
An interdisciplinary seminar on topics appropriate to the application of natural sciences. Prerequisite: graduate standing and BIOL/CHEM 510. (*)

BIOL 595 Independent Study (1-4 VAR)
Prerequisite: graduate standing, biology major, permission of instructor and department. (F,S,SS)

BIOL 598 Graduate Internship (1-4 VAR)
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member. Prerequisite: graduate standing. (S/U grading) (F,S,SS)
BIOL 599 Thesis Research (1-6 VAR)
Repeatable for a maximum of 6 credits. Continued enrollment is dependent upon satisfactory progress in thesis work. Prerequisite: graduate standing and approval of department chair or program director. (F,S,SS) Repeatable (6)

## BUSINESS ADMINISTRATION (BUSAD) UNDERGRADUATE COURSES

BUSAD 101 Business-Careers and Opportunities 1(1-0) Introduction to the world of business that will provide insights on careers, business disciplines, and the world of business. (F,S)

BUSAD 102 Introduction to Personal Finance 1(1-0)
This introductory course serves as a vehicle to deliver fundamental personal financial management skills to students, providing the tools necessary to make good financial decisions. (*)

BUSAD 250 Business Law 3(3-0)
Explores the legal environment of business. Topics include contracts, torts, agency, ethical and criminal implications of business actions, and property laws. Prerequisite: ENG 101 and 102, BUSAD 101. (F,S)

BUSAD 265 Inferential Statistics and Problem Solving 3(3-0) Statistical methods in business, sampling, parameter estimation, hypothesis testing, correlation, multiple regression and chi square tests. Use of problem solving methods. Prerequisite: MATH 121. (F,S)
BUSAD 270 Business Communications 3(3-0)
Means of extending management capabilities through effective internal and external communications, including data organization and presentation. Prerequisite: ENG 101 and 102. (F,S)

## BUSAD 302 Ethics in Business 3(3-0)

Examination of issues addressing ethical, legal, social and environmental responsibilities of businesses toward government, customers, employees, and the general public. Prerequisite: junior standing. (F,S)
BUSAD 360 Advanced Business Statistics 3(3-0)
Development of advanced statistical techniques to support business decision-making. Topics include advanced multiple regression analysis, analysis of variance and nonparametric techniques. Prerequisite: BUSAD 265. (F,S)

## BUSAD 475 International Business 3(3-0)

Opportunities and problems of multinational firms including environmental factors and formulation of strategies and policies for all functional areas of business. Prerequisite: FIN 330, MGMT 201 and MKTG 340. (F,S)

BUSAD 480 Business Consulting 3(3-0)
Integrating prior studies in business into a realistic approach to assist in solving problems faced by selected firms and organizations in the community. Prerequisite: senior standing in the School of Business and completion of all foundation and fundamentals courses. (*)

BUSAD 490 Special Projects (1-6 VAR) (*) Repeatable (6)
BUSAD 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. ( ${ }^{*}$ ) Repeatable (6)
BUSAD 493 Senior Seminar 1(1-0)
Designed to help majors draw connections among the business disciplines. The course provides an in-depth examination of contemporary issues in the business environment. Prerequisite: senior standing. (F,S)

BUSAD 495 Independent Study (1-3 VAR)
Prerequisite: senior standing and permission of department chair. (*) Repeatable (6)
BUSAD 498 Internship (1-6 VAR)
Supervised field work in selected business, social and governmental organizations; supplemented by written reports (S/U grading). Prerequisite: junior or senior standing in the School of Business and permission of internship coordinator. (*) Repeatable (6)

## GRADUATE COURSES

## BUSAD 501 Fundamentals of Statistics 3(3-0)

This class prepares students to solve business problems using statistics and business research methods using statistical estimation, hypothesis testing, and advanced statistical methods. Prerequisite: admission to MBA. (*)

## BUSAD 502 Business Ethics and Environment 3(3-0)

The impact of continued social, political, economic, technological, and legal pressures upon ethical business issues and managerial decision making. Prerequisite: admission to MBA or permission of MBA Director. (*)

BUSAD 505 Inferential Statistics and Problem Solving 3(3-0)
Statistical methods in business, sampling, parameter estimation, hypothesis testing, correlation, multiple regression and chi square tests. Use of problem solving methods. (*)

## BUSAD 545 Advanced Quantitative Analysis for

Business 3(3-0)
This class prepares students to solve business problems using advanced quantitative methods and business modeling techniques. Prerequisite: admission to MBA. (*)

BUSAD 575 International Business 3(3-0)
The objective of this course is to familiarize students with the dynamics and complexity of managing business across the globe. Prerequisite: admission to MBA or permission of MBA Director. (*)

BUSAD 580 Business Research Methodology 3(3-0)
Fundamentals of qualitative and quantitative research design including development of hypothesis and assessment techniques in preparation for undertaking research projects. Prerequisite: admission to MBA or permission of MBA Director. (*)

BUSAD 591 Special Topics 3(3-0)
Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

## BUSAD 592 Research (1-6 VAR)

The student will work under the close supervision of a graduate faculty member in basic or applied research resulting in a thesis or report of high academic quality. (IP and S/U grading) (*)

## BUSAD 595 Independent Study (1-3 VAR)

Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

## CIVIL ENGINEERING TECHNOLOGY (CET) UNDERGRADUATE COURSES

CET 101 Intro to Civil Engineering Technology 2(1-2) Introduction to the field of Civil Engineering Technology: review career opportunities, study the engineering design process, explore issues of professional ethics, and do team projects. (F)

## CET 102 Surveying I 3(0-6)

Beginning course in plane surveying; covers proper chaining techniques, care and use of engineering levels, differential leveling, traversing, and construction surveying. (F)

## CET 103 Surveying II 3(0-6)

Introduction to land, topographic, and construction surveying. Prerequisite: CET 102, or permission of instructor. Corequisite: CET 116. (S)

## CET 115 Civil Drafting I 3(0-6)

An introduction to basic drafting, AutoCAD and Structural Detail drafting. Corequisite: CET 102. (F)

CET 116 Civil Drafting II 3(0-6)
An introduction to maps, traverses, contours, plans and profiles, cut and fills. An introduction to architectural plans, elevations and section. Prerequisite: CET 115. Corequisite: CET 103. (S)

## CET 202 Statics 3(3-0)

Basic concepts and application of static forces, couples, resultants, equilibrium, friction, frames, trusses, free body diagrams, and centroids. Prerequisite: MATH 121. (F)

## CET 206 Strength of Materials 4(3-2)

A study of the response of materials to loads with attention to stresses, strains, elastic and plastic responses to loading. Experiments demonstrate those principles. Prerequisite: CET 202. (S)

CET 207 Construction Materials and Methods 3(3-0)
Properties, uses and methods of assembly of building materials as they apply to the construction industry. (F)
CET 208 Concrete and Asphalt Materials 3(2-2)
Study of Portland cement concrete and bituminous pavements. Manufacturing, mix design, placing and finishing of these materials. The laboratory includes ASTM testing of these materials. (S)

CET 222 Dynamics 3(3-0)
A study of the basic equations of motion, kinematics, kinetics, momentum, potential energy, work, and highway dynamics. Prerequisite: CET 202. (S)
CET 226 Engineering Problem Solving 2(1-2)
An introduction to computer programming to solve engineering problems that apply to the complete spectrum of civil engineering technology courses. Prerequisite: CIS 101 and 104 and MATH 121. (F)

CET 303 Construction Management 3(3-0)
Job specifications, contractor, organization, bonding, contracts, insurance and labor relations. Prerequisite: junior standing or permission of instructor. (S)
CET 304 Building Cost Estimating 3(3-0)
Estimating related to building construction industry. Quantity take-off, labor and material costs, records and assembling a general contractor's bid. Prerequisite: CET 207 or permission of instructor. (*)
CET 305 Heavy/Highway Cost Estimating 3(3-0)
Estimating relating to heavy and highway construction. Covers heavy equipment selection and use, project scheduling and production rates. Prerequisite: junior standing or permission of instructor. (F)

CET 312 Route Surveying 3(2-2)
Highway and route surveys, horizontal and vertical curves, grades, slope staking and earthwork. Prerequisite: CET 103 and MATH 124. (*)
CET 315 Soil Mechanics Technology 3(2-2)
Basic principles of soil mechanics and foundation design as they apply to design and construction. ASTM field tests will be done in the laboratory. Prerequisite: CET 206. (S)

CET 316 Structural Analysis 3(3-0)
Introduction to the analysis of statically determinate and indeterminate structures. Prerequisite: CET 206, MATH 126, PHYS 201/L. (F)

## CET 317 Hydraulics 3(2-2)

Study of non-compressible fluids including the flow of water in pipes and open channels. Laboratory involves measuring static pressure, head losses, and flow rates. Prerequisite: CET 202, MATH 126, PHYS 201/L. (F)
CET 372 Traffic Analysis and Control 3(2-2)
Introduction to traffic engineering including traffic system characteristics, traffic studies, capacity analysis, and traffic control. Laboratory activities include traffic data collection and analysis. Prerequisite: PHYS 201 or CET 222 or permission of instructor. (S)

## CET 401 Land Surveying 3(3-0)

Boundary control, property descriptions, deeds, subdivisions, emphasizing the legal aspects of land law and surveying. Prerequisite: CET 103 or permission of instructor. ( ${ }^{*}$ )

CET 404 Structural Steel Design 3(3-0)
Structural steel design of beams, columns, girders and trusses to AISC standards. Prerequisite: CET 316. (S)
CET 405 Reinforced Concrete Design 3(3-0)
Design of reinforced concrete beams, columns, girders and floor systems to conform to current ACI code. Prerequisite: CET 316. (F)

CET 412 Hydrology 3(3-0)
Hydrologic cycle including precipitation, streamflow, groundwater runoff and the preparation of hydro graphs and frequency analysis. Prerequisite: MATH 124, CET 317. (S)

CET 414 Bridge Design 3(3-0)
Design of bridge slabs, beams, abutments, wingwalls, piers, and footings. Prerequisite: senior status. (*)
CET 415 Water and Sewer System Design 3(3-0)
Fundamental principles of water supply and sewage design. Prerequisite: CET 317, CHEM 111. (F)

CET 455 Senior Project Seminar 1(1-0)
Students formulate a proposal for their senior project and make written and oral presentations of the proposal. Speakers from industry present real-world examples. Prerequisite: senior standing in CET and permission by Department Chair. ( $\mathrm{S} / \mathrm{U}$ grading) ( F )

## CET 456 Senior Project 3(1-4)

Practical realistic projects relating to CET discipline are selected for design, analysis, and execution. Students prepare reports and make oral presentations. Prerequisite: CET 455. (S)
CET 473 Highway Design 3(3-0)
A study of highway planning and design. Prerequisite: MATH 126, CET 208, CET 315, CET 372. (F)

CET 475 Engineer-In-Training Preparation 3(3-0)
This course is designed as preparation for the state Engineer-In-Training examination. Subjects include general engineering and civil engineering topics. Prerequisite: senior standing or approval of instructor. (S)

## CET 491 Special Topics (1-3 VAR)

Prerequisite: permission of instructor. (*) Repeatable

## CET 495 Independent Study (1-3 VAR)

Directed study for students interested in specific areas of CET. Prerequisite: junior standing in CET and permission of instructor. ( $F, S$ ) Repeatable

CET 496 Cooperative Education Placement (1-4 VAR) Industrial cooperative education work experience under the direction of a field supervisor and faculty member. Prerequisite: permission of instructor. (F,S,SS) Repeatable

## CHEMISTRY (CHEM)

## UNDERGRADUATE COURSES

CHEM 101 Chemistry and Society 3(3-0)
Chemistry related to the everyday world. Drugs, food, pollution, pesticides, consumer products, energy, and home health. Principally for non-science majors. (F,S)

CHEM 101L Chemistry and Society Lab 1(0-2)
Laboratory is optional. Experiments to exemplify the logical steps of problem solving and explore the physical and chemical world. Corequisite: CHEM 101. (F,S)
CHEM 111 Principles of Chemistry 3(3-0)
Fundamental laws, theories and principles of chemical reactions. Credit not applicable for chemistry majors or minors. Prerequisite: satisfactory math placement score or permission of the instructor. Corequisite: CHEM 111L. (F,S)

CHEM 111L Principles of Chemistry Lab 1(0-2)
Experiments using common chemical equipment and techniques to aid the student in learning what occurs in the chemical laboratory. Corequisite: CHEM 111. (F,S)

CHEM 121 General Chemistry I 4(4-0)
For science, engineering and pre-professional curricula. Atomic theory, chemical bonding, periodic properties, states of matter, oxidation-reduction, stoichiometry, thermochemistry, inorganic nomenclature. Prerequisite: one year high school chemistry or equivalent, and College Algebra or equivalent math placement score. Corequisite: CHEM 121L. ( $\mathrm{F}, \mathrm{S}$ )

CHEM 121L General Chemistry Lab I 1(0-2)
Corequisite: CHEM 121. (F,S)
CHEM 122 General Chemistry II 4(4-0)
Continuation of CHEM 121. Thermodynamics, kinetics, equilibria, nuclear chemistry, electrochemistry, acids and bases, solutions, descriptive inorganic chemistry. Prerequisite: CHEM 121. Corequisite: CHEM 122L. (F,S)

CHEM 122L General Chemistry Lab II 1(0-2)
Laboratory component to CHEM 122. Corequisite: CHEM 122. (F,S)

CHEM 150 (PHYS 150) Elementary Concepts in Physics and Chemistry 4(3-2)
Hands-on standards-based approach to understanding basic concepts of physics and chemistry. Integrated lecture, lab and discussion periods. (F,S,SS)

CHEM 160 Introduction to Forensic Science 3(3-0)
Overview of Forensic Science. Crime scene investigation. Evidence collection. Microscopy techniques. Arson analysis. Fingerprints. Serology and DNA use. Corequisite: CHEM 160L. (F,S,SS)

CHEM 160L Intro to Forensic Science Lab 1(0-2)
Overview of Forensic Science Laboratory. Evidence handling and collection. Microscopy techniques. Arson analysis, Fingerprints. DNA fingerprinting. Corequisite: CHEM 160. (F,S,SS)

CHEM 211 Introduction to Organic Chemistry 3(3-0)
Survey of organic chemistry chemical structure, reactivity and functional groups are presented in context of relevance to society. Prerequisite: CHEM 111. Corequisite: CHEM 211L (S)

## CHEM 211L Introduction to Organic Chemistry Lab

 1(0-2)Survey of organic chemistry laboratory course. Basic organic laboratory techniques and skills, both micro and macro scale are presented. Prerequisite: CHEM 111. Corequisite: CHEM 211. (S)

## CHEM 221 Inorganic Chemistry 2(2-0)

Basic principles of inorganic chemistry. The main properties, reaction chemistry, and descriptive chemistry of inorganic elements and compounds. Prerequisite: CHEM 122. Corequisite: CHEM 221L. (F)
CHEM 221L Inorganic Chemistry Lab 1(0-3)
Inorganic laboratory techniques, inorganic qualitative analysis, synthesis and characterization. Corequisite: CHEM 221. (F)

CHEM 260 Forensic Chemistry I 3(3-0)
Investigation of comparative/visual forensic analysis techniques. Topics include fingerprinting, bloodstain pattern analysis, fiber comparisons, and firearms analysis. Prerequisite: CHEM 111 or 121 and CHEM 160. (S)

CHEM 260L Forensic Chemistry I Laboratory 1(0-3)
Development of laboratory skills for comparative/visual forensic analysis. Topics include fingerprinting, bloodstain pattern analysis, fiber comparisons, and firearms analysis. A more in-depth examination of CHEM 160L topics. Prerequisite: CHEM 111 or 121 and CHEM 160L. Corequisite: CHEM 260. (S)

## CHEM 291 Special Topics (1-5 VAR)

Prerequisite: permission of instructor. (*) Repeatable
CHEM 292 Research (1-3 VAR)
Faculty directed research project for undergraduate first or second-year student. May be repeated for a maximum of 3 credits total. Prerequisite: Department Chair approval. (F,S,SS) Repeatable (3)
CHEM 301 Organic Chemistry I 3(3-0)
For majors and pre-professional students requiring a strong background in organic chemistry. Organic reactions and mechanisms as related to molecular structure. Prerequisite: CHEM 122. Corequisite: CHEM 301L. (F,S)
CHEM 301L Organic Chemistry Lab I 2(0-6)
Corequisite: CHEM 301. (F,S)
CHEM 302 Organic Chemistry II 3(3-0)
Continuation of CHEM 301. Prerequisite: CHEM 301. Corequisite: CHEM 302L. (F,S)

CHEM 302L Organic Chemistry Lab II 2(0-6)
Prerequisite: CHEM 301L. Corequisite: CHEM 302. (F,S)
CHEM 311 Survey of Biochemistry 3(3-0)
Survey of biochemistry. For pre-health professional students. Intermediary metabolism is taught at an intermediate level and in the context of human nutrition and clinical applications. Prerequisite: CHEM 301. Corequisite: CHEM 302. (F)

CHEM 317 Quantitative Analysis 3(3-0)
Volumetric and gravimetric analysis integrated with instrumental analysis, both optical and electrometric methods. Prerequisite: CHEM 122. Corequisite: CHEM 317L. (F)

CHEM 317L Quantitative Analysis Lab 2(0-6)
Corequisite: CHEM 317. (F)
CHEM 321 Physical Chemistry I 3(3-0)
Chemical thermodynamics, chemical dynamics, quantum chemistry, chemical structure and spectroscopy. Prerequisite: CHEM 122. Corequisite: MATH 224 and PHYS 201 or 221. (F)

CHEM 322 Physical Chemistry II 3(3-0)
Continuation of CHEM 321. Prerequisite: CHEM 122.
Corequisite: MATH 224 and PHYS 201 or 221. (S)
CHEM 323 Experimental Physical Chemistry 2(0-4)
Laboratory techniques in thermodynamics, chemical equilibria, phase phenomena, kinetics, spectroscopy. Prerequisite: CHEM 321 or permission of instructor. (*)

CHEM 378 Practicum in Laboratory Instruction 1(0-2) Laboratory preparation, instruction, safety, and methods under the guidance of an instructor. May be repeated for a maximum of two credits. Prerequisite: Approval of instructor. (F,S) Repeatable (2)
CHEM 389 Scientific Literature Review 1(1-0)
Surveys of both print and web-based chemical and biochemical literature. May be repeated twice. Prerequisite: CHEM 302. (F,S) Repeatable (2)
CHEM 401 Advanced Organic Chemistry 3(3-0)
Topics of advanced organic chemistry, including organic reactions, mechanisms, natural products, and spectroscopy. Prerequisite: CHEM 302, or permission of instructor. Corequisite: CHEM 401L. (*)
CHEM 401L Advanced Organic Chemistry Lab 1(0-3)
Laboratory course to accompany CHEM 401. Molecular structure determination by chemical and instrumental methods. Corequisite: CHEM 401. (*)

CHEM 403 Polymer Chemistry 3(3-0)
Study of synthetic polymers including synthesis, mechanisms of formation, structure of elucidation, reactivity, properties, and industrial application. Biopolymers also will be considered. Prerequisite: CHEM 302/302L. (*)
CHEM 411 Biochemistry I 3(3-0)
Chemistry of constituents of living matter, including proteins, carbohydrates, nucleic acids and lipids. An introduction to enzymes and coenzymes. Prerequisite: CHEM 302, or permission of instructor. (F)
CHEM 412 Biochemistry II 3(3-0)
Continuation of CHEM 411. Intermediary metabolism of carbohydrates, lipids, and amino acids. Bioenergetics. Prerequisite: CHEM 411. Corequisite: CHEM 412L. (S)
CHEM 412L Biochemistry II Lab 2(0-6)
Prerequisite: CHEM 302. Corequisite: CHEM 412. (*)
CHEM 413 Molecular Basis of Disease 3(3-0)
This advanced seminar course explores the molecular nature of disease and engages students in the study of diseases using current topical biochemical literature. Prerequisite: CHEM 411. (*)

CHEM 419 Instrumental Analysis 3(3-0)
Instrumental techniques in chemical separations, electrochemistry, atomic, and molecular spectroscopy. Prerequisite: CHEM 317 or permission of instructor. Corequisite: CHEM 419L. (S)

CHEM 419L Instrumental Analysis Lab 2(0-6)
Prerequisite: CHEM 317 or permission of instructor. Corequisite: CHEM 419. (S)
CHEM 421 Advanced Inorganic Chemistry 3(3-0)
Structure and bonding, coordination theory, periodic relations, equilibrium, kinetics, thermodynamics, descriptive chemistry. Prerequisite: CHEM 321, or permission of instructor. (S)

CHEM 425 Environmental Chemistry 3(3-0)
Chemical process in air, water and soil. Air, water analysis and treatment, pollution. Prerequisite: CHEM 321, or permission of instructor. (*)

CHEM 431 Advanced Physical Chemistry 3(3-0)
Emphasizes latest developments in applied physical chemistry, including advanced theory, and instrumental and computational applications. Prerequisite: CHEM 321 and 322 or permission of instructor. ( $F, O$ )

## CHEM 460 Forensic Chemistry II 2(2-0)

Investigation of identification techniques for forensic analysis. Topics include arson, biological fluid and drug identification, and DNA analysis. Prerequisite: CHEM 260/L and CHEM 302/L or permission of instructor. Corequisite: CHEM 460L. (F)

CHEM 460L Forensic Chemistry II Lab 2(0-4)
The laboratory will accompany CHEM 460, Forensic Chemistry II lecture. Prerequisite: CHEM 260/L and CHEM 302/L or permission of instructor. Corequisite: CHEM 460. (F)

CHEM 491 Special Topics (1-5 VAR)
Prerequisite: permission of instructor. ( ${ }^{*}$ ) Repeatable
CHEM 492 Research (1-3 VAR)
Faculty directed research project for undergraduate student. May be repeated for a maximum of 3 credits, total. Prerequisite: approval of department chair. (F,S,SS) Repeatable (3)

## CHEM 493 Seminar 1(1-0)

Presentation of a formal presentation on chemical research or a current topic in the chemical literature using software-based delivery methods. May be repeated once. Prerequisite: permission of department chair. (F,S) Repeatable (2)

CHEM 495 Independent Study (1-7 VAR)
Prerequisite: permission of instructor. (*) Repeatable
CHEM 498 Internship (1-6 VAR)
Work experience in the chemistry discipline under the combined supervision of the selected organization and a faculty member. Prerequisite: permission of department chair. (F,S,SS) Repeatable

## GRADUATE COURSES

CHEM 501 Advanced Organic Chemistry 3(3-0)
Topics of advanced organic chemistry including organic reactions, mechanisms, natural products, spectroscopy, and industrial applications. Prerequisite: CHEM 302, or permission of instructor. (*)

CHEM 501L Advanced Organic Chemistry Lab 1(0-3)
Molecular structure determination by chemical and instrumental methods. Advanced synthetic techniques. Corequisite or Prerequisite: CHEM 501. (*)
CHEM 503 Polymer Chemistry 3(3-0)
Study of synthetic polymers including synthesis, mechanisms of formation, structure elucidation, reactivity, properties, and industrial application. Biopolymers also will be considered. Prerequisite: CHEM 302, or permission of instructor. (*)

CHEM 510 Foundations in Graduate Studies 3(3-0)
Laboratory safety. Effective sourcing, use, and interpretation of the literature. Scientific methodology, writing, and review of research ethics. Development of a thesis or internship plan. Prerequisite: graduate standing. (F)

CHEM 511 Biochemistry I 3(3-0)
Chemistry of constituents of living matter, including proteins, carbohydrates, nucleic acid and lipids. An introduction to enzymes and coenzymes. Prerequisite: one year undergraduate Organic Chemistry. (F)

CHEM 512 Biochemistry II 3(3-0)
Intermediary metabolism of carbohydrates, lipids and amino acids. Bioenergetics. Prerequisite: CHEM 411 or 511. (S)

CHEM 512L Biochemistry II Lab 2(0-6)
Prerequisite: CHEM 302. Corequisite: CHEM 512. (*)

CHEM 513 Molecular Basis of Disease 3(3-0)
This advanced seminar course explores the molecular nature of disease and engages students in the study of diseases using current topical biochemical literature. Prerequisite: CHEM 411 or 511. (*)
CHEM 519 Instrumental Analysis 3(3-0)
Instrumental techniques in chemical separations, electrochemistry, atomic, and molecular spectroscopy. Prerequisite: CHEM 317 and 321, or permission of instructor. Co-requisite: CHEM 519L. (S)
CHEM 519L Instrumental Analysis Lab 2(0-6)
Prerequisite: CHEM 317 and 321, or permission of instructor. Corequisite: CHEM 519. (S)

CHEM 520 Health and Safety in the Laboratory 1(1-0)
Review of standard potential hazards encountered in the scientific laboratory including fire, chemical, biological and radiation hazards. Applicable regulations associated with the handling and disposal of hazardous materials and wastes (OSHA, EPA, RCRA, state, Right to Know," etc.). Sources of information regarding hazards (Material Safety Data Sheets, etc.). Control and prevention of spills and fires. Prerequisite: graduate standing. (F)
CHEM 521 Advanced Inorganic Chemistry 3(3-0)
Structure and bonding, coordination theory, periodic relations, equilibrium, kinetics, thermodynamics, descriptive chemistry, industrial applications. Prerequisite: CHEM 321, or permission of instructor. (S)
CHEM 525 Environmental Chemistry 3(3-0)
Chemical processes in the air, water and soil. Air, water soil analysis and treatment. Special emphasis upon the problems and effects of industrial and other pollution. Prerequisite: CHEM 321, or permission of instructor. (*)
CHEM 529 Advanced Analytical Chemistry 3(3-0)
Emphasizes latest developments in applied analytical chemistry, including advanced theory, wet chemical methods, and the design and application of advanced instrumentation. Prerequisite: CHEM 419/L and CHEM 321, or permission of instructor. (S,E)

CHEM 531 Advanced Physical Chemistry 3(3-0)
Emphasizes latest developments in applied physical chemistry, including advanced theory, and instrumental and computational applications. Prerequisite: CHEM 321 and 322 or permission of instructor. $(\mathrm{F}, \mathrm{O})$

CHEM 550 Industrial Chemistry 2(2-0)
The economic importance and special characteristics of the chemical industry. Feedstocks, intermediates and products of the chemical industry including thermoplastics, thermosetting plastics, paints and coatings, elastomers, fibers, surfactants, pharmaceuticals, agricultural chemicals, paper, acids, etc. Market demands, price and cost factors, scale, research, process chemistry and process control, product development. Case studies illustrating above topics. ( ${ }^{*}$ )

## CHEM 560 Forensic Chemistry II 2(2-0)

Investigation of identification techniques for forensic analysis. Topics include arson, biological fluid and drug identification, and DNA analysis. Prerequisite: CHEM 260/L and CHEM 302/L or permission of instructor. Corequisite: CHEM 560L. (F)

CHEM 560L Forensic Chemistry II Laboratory 2(0-4)
The laboratory will accompany CHEM 560, Forensic Chemistry II lecture. Prerequisite: CHEM 260/L and CHEM 302/L or permission of instructor. Corequisite: CHEM 560. (F)

CHEM 578 Practicum in Laboratory Instruction 1(0-2)
Laboratory preparation, instruction and methods under the guidance and supervision of an instructor. May be repeated for a maximum of four credits. Prerequisite: graduate standing or approval of department chair. (S/U grading) (F,S,SS) Repeatable (4)

## CHEM 588 Internship Defense 1(1-0)

Graduate internship presentation, satisfactory report, and examination for completion of MS degree option within the Graduate Programs in Natural Sciences. Prerequisite: graduate standing. ( $F, S, S S$ )

CHEM 589 Thesis Defense 1(1-0)
Thesis presentation and satisfactory written thesis for completion of MS degree option within the Graduate Programs in Natural Sciences. Prerequisite: graduate standing. (F,S,SS)

CHEM 591 Special Topics (1-4 VAR)
Prerequisite: permission of instructor. (*) Repeatable
CHEM 592 Research (1-6 VAR)
Faculty directed research project for graduate students. Prerequisite: graduate standing and approval of department chair or program director. (S/U grading) (F,S,SS) Repeatable
CHEM 593 Seminar 1(1-0)
An interdisciplinary seminar on topics appropriate to the application of natural sciences. Prerequisite: graduate standing and BIOL/CHEM 510. (*)
CHEM 595 Independent Study (1-4 VAR) (*) Repeatable
CHEM 598 Graduate Internship (1-4 VAR)
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member. Prerequisite: graduate standing. ( $\mathrm{S} / \mathrm{U}$ grading). (F,S,SS) Repeatable

CHEM 599 Thesis Research (1-6 VAR) (*) Repeatable

## COMPUTER INFORMATION SYSTEMS (CIS)

## UNDERGRADUATE COURSES

CIS 100 Introduction to Word and Windows 1(1-0)
A competency-based course, topics include: file management, formatting, fonts, editing, reports, footnotes, desktop publishing, clip art, styles, outlines, tables, and mail merge. (F,S,SS)
CIS 103 PowerPoint and Web Publishing 1(1-0)
An introduction to PowerPoint and FrontPage. Includes: presentation templates, charts, object embedding, slide shows, Internet search methods, web page design, web site creation and publishing. Prerequisite: CIS 100 or equivalent. (F,S,SS)

## CIS 104 Excel Spreadsheets 1(1-0)

Includes worksheet design, text and formula manipulation, charts, lists, pivot tables, ranges, lookup tables, data analysis, functions, and macros. Prerequisite: CIS 100 or equivalent. (F,S,SS)

## CIS 105 MS Access DBMS 1(1-0)

Course includes relational database design, table creation, data manipulation, queries, forms, reports, web access, and interface design. Prerequisite: CIS 100 or equivalent. (F,S,SS)

CIS 150 Computer Information Systems 3(3-0)
Survey of Computer Information Systems includes data representation, operating systems, networks, the Internet and information system design. Discussion of careers in CIS. Corequisite: CIS 100. (F,S)

## CIS 171 Introduction to Java Programming 4(3-2)

An introduction to computer programming, design and testing using the Java object-oriented programming language. Topics include language constructs, functions, file handling, inheritance and UML. Prerequisite: CIS 100 or equivalent. (F,S,SS)

## CIS 185 PC Architecture 3(2-2)

In depth study of personal computer hardware, peripherals, and interfaces. Course examines processors, disk drives, buses, video cards, memory and diagnostic software. Corequisite: CIS 150. (F,S)
CIS 240 Object Oriented Analysis and Design 3(3-0)
Practical methods for analyzing business problems and designing large-scale software solutions using object oriented techniques, tools, methodologies, with in-depth focus on the Unified Modeling Language. Prerequisite: CIS 171. (F,S)

CIS 271 Advanced Program Design with Java 4(3-2)
Continuation of CIS 171, includes advanced Java programming constructs such as data structures, multithreading, collections, database connectivity, remote objects and GUI's. Prerequisite: CIS 171 or equivalent. ( $F, S$ )

CIS 289 Network Concepts 3(2-2)
Fundamental hardware, software, and data communication concepts necessary to understand computer networks. Prerequisite: CIS 185. (F,S)

CIS 290 Special Projects (1-5 VAR)
Individual projects designed to extend student knowledge beyond offerings in the current curriculum. Examples include program, database, Web site or network research or development. Prerequisite: sophomore standing and permission of instructor. (F,S,SS) Repeatable (3)

## CIS 291 Special Topics (1-5 VAR)

Study of new and emerging topics and technologies in the computing field. May be repeated for credit. Prerequisite: sophomore standing. (*) Repeatable (3)

CIS 298 Internship (1-5 VAR)
IT-related industrial work experience under the direction of a field supervisor and faculty member. (S/U grading) (F,S,SS) Repeatable (6)

CIS 311 Introduction to Web Development 3(3-0)
An introduction to web site design and implementation using HTML, JavaScript, XML and other state of the art web development tools and languages. Prerequisite: CIS 171. ( $\mathrm{F}, \mathrm{S}$ )

CIS 315 Unix Operating System 3(3-0)
Explore UNIX features, covering command language, file system, mail, and editing. Shell language tools include pipes, filters and I/O redirection. Prerequisite: CIS 289. (F,S)

CIS 350 Data Base Systems 3(3-0)
Design, implementation and use of data base management systems; comparison of available software packages; concepts of query languages and security considerations. Laboratory assignments utilize a relational data base system. Prerequisite: CIS 240 or permission of instructor. (F)
CIS 356 Mobile Application Development 3(3-0) Design and development of mobile applications using objective-C or Java for iOS or Android operating systems. Prerequisite: CIS 271. (*)

CIS 359 Advanced Programming with C\# 3(3-0)
Design and develop desktop and web-based applications using C\# and .NET. Emphasis on advanced programming concepts and technique. Prerequisite: CIS 171. (S)

CIS 360 Information Technology Security 3(2-2)
Applied course emphasizing: need for security, planning, cryptography, physical, email, web, wireless, and security technologies. Develops skills needed for CompTIA Security+ certification. Prerequisite: CIS 315. (F,S)

## CIS 383 E-Commerce 3(3-0)

This course focuses on key issues including e-commerce strategy, business models, technology infrastructure, security and payment systems, e-marketing, and ethical behavior. Prerequisite: MGMT 201 and junior standing. (*)

CIS 401 Network Systems Administration 3(2-2)
Concepts and skills necessary to function as network system supervisor in both Microsoft and a Novell networking environment. Prerequisite: CIS 289. (F)

## CIS 402 Linux Networks and Routing 3(2-2)

Examination and practice of the concepts and skill necessary to function as a system administrator in a Linux environment. Basic concepts of network routing. Prerequisite: CIS 315. (*)

## CIS 411 Internet Server-Side Programming 3(3-0)

Server based web programming and scripting. Includes data base access methods, open source tools, and web application construction from the server side. Prerequisite: CIS 311, CIS 350. (F)

## CIS 432 Senior Professional Project 6(3-6)

Student Teams design and implement database, network, web and other computer-based projects in the local community. Modern analysis, design and modeling techniques are emphasized. Prerequisite: all required CIS classes, MGMT 368. Corequisite: graduating semester or consent of instructor. (S)

CIS 450 Advanced Database Structures 3(3-0)
An advanced study of database technology, design and administration. Students will complete labs and projects, preparing them to sit for the Oracle DBA certification exam. Prerequisite: CIS 350, or permission of instructor. (F)

CIS 461 IT Security Management 3(3-0)
Students learn to assess, design, develop, and implement information security programs for organizations. Covers ongoing management of security programs. Prerequisite: MGMT 201. (S)

CIS 462 Computer Forensics 3(2-2)
Focus on the detection, isolation and response to information security breaches and attacks. Provides a detailed examination of the entire computer forensic process. Prerequisite: CIS 289. (F)

CIS 481 Information Technology Implementation 3(3-0)
Prepares managers to address the complex issues and dynamics surrounding technology-driven change in organizations that introduce new technology. Prerequisite: senior standing or consent of instructor. (F)

CIS 482 Information Technology Strategy 3(3-0)
Prepares information systems workers and other professionals to develop an IT strategy that aligns business strategy with IT infrastructure; emphasis on IT for competitive advantage. Prerequisite: senior standing or consent of instructor. (S)

## CIS 490 Special Projects (1-5 VAR)

Individual projects designed to extend student knowledge beyond offerings in the current curriculum. Examples include program, database, Web site or network research or development. Prerequisite: permission of instructor. (F,S,SS) Repeatable (6)

## CIS 491 Special Topics (1-5 VAR)

Study of new and emerging topics and technologies in the computing field. May be repeated for credit. Prerequisite: junior or senior standing. (F,S,SS) Repeatable (9)

## CIS 493 Senior Seminar 1(1-0)

Seminar concerning appropriate career topics in computer information systems. Speakers may include guests, faculty or students. Student outcomes will be assessed. Required of majors. Prerequisite: all required CIS classes. Corequisite: graduating semester or consent of instructor. (S/U grading) (S)

## CIS 498 Internship (1-5 VAR)

IT-related industrial work experience under the direction of a field supervisor and faculty member. Prerequisite: junior or senior standing. (S/U grading) (F,S,SS) Repeatable (6)

## GRADUATE COURSES

## CIS 532 Professional Project 6(3-6)

Student teams design and implement database, network, web and other computer-based projects in the local community. Modern analysis, design and modeling techniques are emphasized. Prerequisite: all required CIS classes, MGMT 368. (F,S)

CIS 550 Data Base Systems 3(3-0)
Design implementation and use of database management systems. Comparison of available software packages. Discussion of query languages, security, and recovery. Prerequisite: CIS 240 or MGMT 365 or MGMT 565 or permission of instructor. (F)

## CIS 560 Information Technology Security 3(2-2)

Applied course emphasizing: need for security, planning, cryptography, physical, email, web, wireless, and security technologies. Develops skills needed for CompTIA Security+ certification. Prerequisite: CIS 289 or consent of instructor. (F,S)

CIS 561 IT Security Management 3(3-0)
Students learn to assess, design, develop, and implement information security programs for organizations. Covers ongoing management of security programs. Prerequisite: any Introduction to Management course. (S)

CIS 562 Computer Forensics 3(2-2)
Focus on the detection, isolation and response to information security breaches and attacks. Provides a detailed examination of the entire computer forensic process. Prerequisite: consent of instructor. (F)

CIS 581 Information Technology Implementation 3(3-0)
Prepares managers to address the complex issues and dynamics surrounding technology-driven change in organizations that introduce new technology. Prerequisite: graduate standing. (F)
CIS 582 Information Technology Strategy 3(3-0)
Prepares information systems workers and other professionals to develop an IT strategy that aligns business strategy with IT infrastructure; emphasis on IT for competitive advantage. Prerequisite: graduate standing. (S)

CIS 583 E-Commerce 3(3-0)
This course focuses on key issues including e-commerce strategy, business models, technology infrastructure, security and payment systems, e-marketing, and ethical behavior. Prerequisite: admission to MBA or permission of MBA Director. (*)

CIS 591 Special Topics (1-5 VAR)
Study of new and emerging topics and technologies in the computing field. May be repeated for credit. Prerequisite: graduate student standing and instructor permission. (F,S,SS)

## CONSTRUCTION MANAGEMENT (CM) <br> UNDERGRADUATE COURSES

CM 101 Intro to Construction Management 2(1-2) Identify and understand the relationships among participants in the construction process and its history. Including risks, construction processes, construction law, regulations and construction project delivery. (F)

## CM 231 Statics and Structures 4(4-0)

An introduction to statics, strength of materials, and theory of structures and its applications to building construction Prerequisite: PHYS 201, 201L and either MATH 122 or MATH 124. (F)

## CM 320 Soils in Construction 3(2-2)

A study of soil as a construction material; including investigation, testing, classification, engineering properties and modification techniques, excavations, fills, slope stability, and pavement subgrades. Prerequisite: CM 231. (S)
CM 330 Wood Structural Systems 3(2-2)
A study of production and properties of wood, design methods for wood structural elements and fasteners, and production and erection methods of wood structures. Prerequisite: CM 231. (F)

CM 341 Concrete and Steel Structures 4(3-2)
A study of concrete and steel structures including design elements and construction methods for simple structural systems, joints, connections, fasteners, and concrete formwork. Prerequisite: CM 231. (S)

CM 351 Construction Planning \& Scheduling 3(2-2)
Principles and techniques of planning and scheduling for construction projects. Topics include bar charts, Critical Path Method, precedence networks and cost-time takeoffs. Prerequisite: CET 304 or CET 305. (S)

CM 391 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable
CM 445 Construction Safety 2(2-0)
The study of safe construction techniques, workers compensation insurance, OSHA regulations and requirements, cost of accidents, and ethical conduct regarding safety. Prerequisite: CET 207. (S)

CM 451 Mechanical \& Electrical Systems 4(4-0)
The study of mechanical and electrical systems associated with building construction: climate control systems, water and waste water systems, electric power and electronic communication systems. Prerequisite: PHYS 201, CET 207. (F)

CM 461 Construction Law 3(3-0)
Legal documents and operation in construction management including business ownership and organization, business development through bidding and negotiations, contracts, communication during construction, insurance and accounting. Prerequisite: CET 303. (F)
CM 465 Construction Accounting \& Finance 3(3-0)
Construction project analysis/financial control including, cash flow analysis and management, overhead cost and break even analysis, time value of money, banking, and bonding. Prerequisite: ACCTG 201. (S)

## CM 475 Senior Project 3(1-4)

An exercise in construction project analysis, cost estimating, scheduling, and the preparation and professional presentation of a project bid package for an organization. Prerequisite: senior standing in CM; must be within 2 semesters of graduation. (S)

CM 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable

CM 495 Independent Study (1-3 VAR)
Directed study for students interested in a specific area of CM. Prerequisite: junior or senior standing in CM major and permission of instructor. (F,S) Repeatable (2)

## CHICANO STUDIES (CS) <br> UNDERGRADUATE COURSES

CS 101 Introduction to Chicano Studies 3(3-0)
Overview of the historical, political and socio-cultural experience of the Chicano. ( $\mathrm{F}, \mathrm{S}, \mathrm{SS}$ )

CS 136 (HIST 136) The Southwest United States 3(3-0) This course traces the culture and historical development of the southwestern United States, including cultural contributions of the American Indian and Hispanic peoples. ( $F, S$ )

CS 220 (ENG 220) Survey of Chicano Literature 3(3-0)
Survey of outstanding contemporary Chicano works. Literature deals with Chicano themes, including analysis of folklore and myth. (*)

CS 230 (SW 230) Chicano: Social and Psychological Study 3(3-0)
Social and psychological forces faced in the Chicano community. (F)

CS 235 Ballet Folklorico 3(1-2)
The Mexican Folkloric Ballet class is designed with the interest of learning the history and art of an important part of Mexican culture, Dance." (*) Repeatable (6)

CS 291 Special Topics (1-3 VAR)
Topics in Chicano studies, identified by student/faculty interest. Prior work in Chicano studies desirable. (*) Repeatable

CS 303 Chicano Labor History in the United States 3(3-0) Chicano experience in the American labor market from 1848 to present. (*)

CS 306 (WS 306) La Chicana 3(3-0)
A social cultural and historical overview of the Chicana experience and contributions. ( $\mathrm{F}, \mathrm{S}$ )

CS 325 (SW 325) Health in the Chicano Community 3(3-0) Health care traditions and current health care systems in the barrio. (S)

CS 341 (WS 341) Chicana Writers 3(3-0)
Survey of Chicana writers from the early 1900's to the present. Along with the literature, aspects of history, sociology and politics will be incorporated. (*)
CS 346 (HIST 346) History of Mexico 3(3-0)
This course surveys the major political, economic, social and cultural developments of Mexico from pre-Columbian times to the present. (*)

CS 401 (WS 401) Third World Feminisms 3(3-0)
This course focuses on Third World women's challenging views of global feminism and feminist representations of other women. (*)

CS 420 Voices of Protest 3(3-0)
This course will highlight the contributions of people of color throughout the history of the United States. Prerequisite: junior or senior level standing. (F,S)

CS 485 Capstone 3(3-0)
Students will develop a project in which they will develop and execute a research assignment related to ethnicity, gender, or diversity. Prerequisite: senior level standing; permission of the instructor. (*)

CS 489 (HIST 489) Borderlands 3(3-0)
History of the Mexican cession to the U.S. from its Indian and Hispanic origins to the present. Prerequisite: CS/HIST 136 or HIST 211 or HIST 201 or HIST 202, or permission of instructor. (S)

CS 491 Special Topics (1-3 VAR)
Topics in Chicano Studies, identified by student/faculty interest. Prior work in Chicano Studies desirable. (*) Repeatable

CS 495 Independent Study (1-3 VAR)
Special topics dealing with the Chicano and society. Prerequisite: CS 101. (F,S,SS)

CS 498 Internship (1-3 VAR)
For students with advanced standing. Practical experience through internships in government, business, and other community organizations. Prerequisite: CS 101, CS 136, CS 306 and permission from program coordinator. (S)

## DIVERSITY STUDIES (DS)

## UNDERGRADUATE COURSE

DS 485 Capstone 3(3-0)
Students will develop a project in which they will develop and execute a research assignment related to ethnicity, gender, or diversity. Prerequisite: senior level standing and permission of instructor. (*)

## ECONOMICS (ECON)

## UNDERGRADUATE COURSES

ECON 201 Principles of Macroeconomics 3(3-0)
Applications oriented approach to understanding the economy including monetary policy, deficits and surpluses, international issues; fundamental differences between liberal and conservative economic policies. Prerequisite: MATH 109 or MATH 121. (F,S)

## ECON 202 Principles of Microeconomics 3(3-0)

Illustrates how firms make price, wage and profit maximizing decisions. Other topics include market performance, market failure, environmental issues and government intervention. Prerequisite: MATH 109 or MATH 121. (F,S)
ECON 301 Intermediate Macroeconomics 3(3-0)
In-depth study of macroeconomic models including classical, Keynesian, monetarist, new classical and new Keynesian systems. Evaluates applications of monetary and fiscal policies in different models. Prerequisite: ECON 201 and ECON 202. (F)

ECON 302 Intermediate Microeconomics 3(3-0)
In-depth study of microeconomic theories of production and consumption. Emphasis on strategic behavior and decision making under uncertain conditions. Prerequisite: ECON 201 and ECON 202. (S)

## ECON 308 Economics for Managers 3(3-0)

Advanced study of economic concepts for managerial decision-making. Topics covered include demand estimation and elasticity, cost estimation, macroeconomic indicators, and the Federal Reserve system. Prerequisite: ECON 201 and ECON 202. (F,S)

ECON 310 Money and Banking 3(3-0)
Topics include behavior of interest rates, money supply process and theory of central banking, determinants of exchange rates and current issues of international financial system. Prerequisite: ECON 201 and ECON 202. (*)

## ECON 420 Regional Economic Analysis 3(3-0)

Applies regional economic concepts to real-world projects. Develops skills in accessing a community's trade area, trade relations between communities and sources of local employment growth. Prerequisite: ECON 201 and ECON 202. (*)

ECON 475 International Economics 3(3-0)
International trade and finance theory. Topics include trade protectionism, regional alliances, role of international organizations, economic development, exchange rate determination and balance of payments. Prerequisite: ECON 201 and ECON 202. (*)
ECON 490 Special Projects (1-6 VAR) (*) Repeatable (6)
ECON 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable (6)
ECON 495 Independent Study (1-3 VAR)
Prerequisite: senior standing in School of Business and permission of department chair. (*) Repeatable (6)

## ECON 498 Internship (1-6 VAR)

Supervised field work in selected business, social, and governmental organizations; supplemented by written reports. Prerequisite: junior or senior standing in School of Business and permission of internship coordinator. (S/U grading) (*) Repeatable (6)

## GRADUATE COURSES

ECON 501 Fundamentals of Economics 1.5(1.5-0)
This class prepares students to understand the market economy and forces that affect prices of goods and services, prices of resources and profit maximizing decisions. Prerequisite: admission to MBA. (*)
ECON 505 Principles of Microeconomics 3(3-0)
Applications oriented approach to understanding the economy including monetary policy, deficits and surpluses, international issues; fundamental differences between liberal and conservative economic policies. (*)

ECON 510 Economics for Managers 3(3-0)
Provides the macro- and micro-economic understanding managers will use throughout their careers. Topics include demand estimation, pricing, decisions under uncertainty, domestic monetary policy, international economics. Prerequisite: admission to MBA or permission of MBA Director. (*)

ECON 591 Special Topics 3(3-0)
Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

ECON 595 Independent Study (1-3 VAR)
Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

## EDUCATION (ED)

## UNDERGRADUATE COURSES

ED 102 Teaching as a Career 1(1-1)
Orientation to teaching and teacher education. Class sessions and classroom observation required. Not required for teacher certification. (F,S)

## ED 202 Foundation of Education 3(3-0)

Historical, philosophical and sociological dimensions of education including legal and financial challenges associated with the institution of education. (F,S,SS)

ED 210 Human Growth and Development for Educators 3(3-0) Physical, mental, social and emotional growth of the individual; provides teachers with needed perspectives on elementary and secondary school students. (F,S,SS)

ED 280 Educational Media and Technology 3(3-0)
Prepares teachers to use technology for instruction, assessment, management, and research. (F,S,SS)

ED 301 Frameworks of Teaching 3(3-0)
Includes approaches to designing learner-centered classroom communities through applications of standards-based instruction, effective planning and assessment, and classroom management; 30 hours of field experience. Prerequisite: completion of 45 credit hours and 2.6 cumulative GPA. ( $F, S$ )

## ED 325 Early Field Experience with the Atypical Learner

 (1-3 VAR)Development and implementation of principles in teaching atypical learners in a tutorial situation. Prerequisite: admission to Teacher Education Program. (*) Repeatable
ED 380 Integrated Methods in Elementary 3(3-0)
Prepares elementary teachers to integrate the expressive arts and physical education into the elementary curriculum; 30 hours of field experience. Prerequisite: acceptance into the Teacher Education Program. (F,S)
ED 400 Workshop (1-3 VAR)
Designed for special activity-oriented experiences to be conducted in short sessions. Each workshop has a subtitle and no subtitle may be repeated for credit. Prerequisite: acceptance to the Teacher Education Program or permission of instructor. (*) Repeatable

ED 406 Behavioral Support 3(3-0)
Prepares teachers to implement individual, classroom-wide and school-wide behavioral supports and interventions. Field experience required. Prerequisite: admission to Teacher Education. (SS)

ED 407 Levels of Support I 3(3-0)
Prepares teachers to teach students with special needs in inclusive environments, with emphasis on literacy, math, and academic interventions. Requires field experience. Prerequisite: admission to Teacher Education and a beginning reading course. (SS)

ED 408 Levels of Support II 3(3-0)
Addresses effective instruction for secondary students, including transition planning. Requires field experience. Prerequisite: admission to Teacher Education and a beginning reading course. (F)

ED 409 Levels of Support III 3(3-0)
Focuses on instructional programs for K-12 students with severe learning and behavioral challenges. Requires field experience. Prerequisite: admission to Teacher Education and a beginning reading course. (S)

## ED 410 Collaboration in Education 3(3-0)

Supports skills at co-teaching, teaming, and collaboration with teachers, families, paraprofessionals, and others to strengthen student achievement. Requires field experience. Prerequisite: admission to Teacher Education and a reading instruction course. (S)

ED 412 Teaching Diverse Learners 3(3-0)
Focuses on legislation for special education, nature of exceptionalities, and meeting the needs of K-12 students, including second language learners; 30 hours field experiences. Prerequisite: acceptance into the Teacher Education Program. (F,S)

ED 413 Teaching Elementary Social Studies 2(2-0)
Methods of teaching social studies in the elementary school. Prerequisite: acceptance into the Teacher Education Program. (F,S)

ED 414 Teaching Elementary Science and Health 2(1.5-1.5)
Methods of teaching health and science in the elementary school. Part of elementary field experience block. Prerequisite: acceptance into the Teacher Education Program. (F,S)

ED 417 Teaching Mathematics in Elementary School 2(1.5-1.5)
Scope and sequence of elementary school mathematics are examined along with instructional methods that address the developmental differences of children; 30 hours of field experiences. Prerequisite: MATH 361 and acceptance into the Teacher Education Program. (F,S)

ED 421 Classroom Integration of Internet 2(2-0)
Methods to effectively and legally integrate the Internet into the classroom as a communication and instructional tool. Prerequisite: ED 280, admission to Education. (F,S)
ED 423 Teaching and Managing Technology 3(3-0)
Strategies, processes, and procedures for managing technology in K-12, including efficient use of emerging pedagogies. Field experience required. Prerequisite: ED 280, admission to Education. (F,S)

ED 427 Productivity Tools for Classroom 1(1-0)
Applications of Microsoft Office as a productivity tool, including integration of use in classroom. Field experience required. Prerequisite: ED 280, admission to Education. (F,S)

ED 428 Integration of Educational Software 1(1-0)
Familiarity with and criteria for selecting evaluating, and using quality educational software. Field experience required. Prerequisite: ED 280, admission to Education. (F,S)
ED 429 Literacy \& Technology 3(3-0)
Methods for using technology to assess and teach literacy. Prerequisite: ED 280, admission to Education. (F,S)

ED 431 Diverse Learners \& Technology 3(3-0)
Strategies for using technology to enhance learning for all students, with emphasis on the relationship between technology and equity. Field experience required. Prerequisite: ED 280, admission to Education. (F,S)

ED 432 Hardware \& Networking for Educators 3(3-0)
Pedagogical and practical considerations in using networking and hardware in schools. Prerequisite: ED 280. (SS)
ED 433 Instructional Theory \& Tech Design 3(3-0)
Instructional system design theories and models and their adaptation to plan and use technology effectively in the classroom. Field experience required. Prerequisite: ED 280, admission to Education. (F,S)

ED 434 Multimedia Design 3(3-0)
Methods and tools for creating multimedia learning objects for K-12 classrooms. Field experience required. Prerequisite: ED 280, admission to Education. (SS)

## ED 435 Classroom Management 3(2-3)

Includes general teaching methods and strategies, learning theories applied to teaching discipline, curriculum educational measurement and evaluation, school organization and school law applicable to classroom teachers. Field experience required. Prerequisite: acceptance into the Teacher Education Program. (F,S)
ED 436 Technology \& Assessment Tools 3(3-0)
Prepares teachers to use technology in assessment practices in the classroom. Prerequisite: admission to Teacher Education. (SS)

ED 444 Teaching Secondary Science 4(3-2)
Focuses on teaching methods, materials, and assessment strategies necessary to prepare students to teach in secondary standards-based science classrooms; 60 hours of field experience. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 445 Assessment \& Data Driven Instruction 3(3-0)
Prepares teachers to select, administer, and interpret formal and informal assessments to improve instruction. Requires field experience. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 446 Teaching K-12 Art 4(3-2)
Focuses on art curriculum, methods, and assessment to prepare art educators to successfully teach in K-12 standardsbased art classrooms; 60 hours of field experience. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 447 Teaching English in Secondary Schools 4(3-2)
Familiarizes students with Colorado foreign language standards, standards-based lesson and unit planning, and authentic assessment; 60 hours of field experiences. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 448 Teaching Foreign Language (K-12) 4(3-2)
Familiarizes students with Colorado foreign language standards, standards-based lesson and unit planning, and authentic assessment; 60 hours of field experiences. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 451 Teaching Secondary Social Studies 4(3-2)
Familiarizes students with the Colorado content standards, including standards-based lesson and unit planning strategies and authentic assessment; 60 hours of field experiences. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 452 Teaching Secondary Business 4(3-2)
Prepares teachers to teach all areas of the business curriculum in secondary schools; 60 hours of field experiences. Prerequisite: admission to Teacher Education. (*)
ED 472 Teaching Early Childhood 3(3-0)
Methods for teaching literacy, math, motor and social skills, science, and social studies in early childhood. Prerequisite: admission to Teacher Education or graduate standing and completion of a teaching program. (*)

ED 473 Creative Arts in Early Childhood 3(3-0)
Exploration of principles and methods for teaching music, movement, visual arts and dramatic play in early childhood. Prerequisite: admission to Teacher Education or graduate standing and completion of a teaching program. (*)

ED 481 Practicum \& Seminar in Education (3-6 VAR)
Supervised practicum and seminar in second teaching or endorsement area. Prerequisite: admission to Education. (F,S,SS) Repeatable
ED 485 Capstone Seminar in Education 2(2-0)
Explores substantive issues facing teacher, including meeting the needs of at-risk students; creating inclusive, equitable learning communities, and methods of effective inquiry in education. Prerequisite: acceptance into the Teacher Education Program and enrollment in student teaching. (F,S)

ED 487 Student Teaching Elementary (6, 12 VAR)
Elementary level. Application must be submitted on or before date in the Teacher Education Handbook prior to the semester in which student teaching will commence. Prerequisite: approved application for student teaching. (F,S)

## ED 488 Student Teaching Secondary (6, 12 VAR)

Secondary level. Application must be submitted on or before date in the Teacher Education Handbook prior to the semester in which student teaching will commence Prerequisite: approved application for student teaching. (F,S)

## ED 489 Student Teaching K-12 (6, 12 VAR)

$\mathrm{K}-12$ level. Application must be submitted on or before date in the Teacher Education Handbook prior to the semester in which student teaching will commence. Prerequisite: approved application for student teaching. (F,S)

## ED 491 Special Topics (1-3 VAR) (*) Repeatable

ED 494 Field Experience (1,3,5,10 VAR)
Field experience in an educational setting. Not applicable to teacher certification (S/U grading). (*) Repeatable

ED 495 Independent Study (1-3 VAR) (*) Repeatable

## GRADUATE COURSES

ED 500 Workshop (.5, 1, 1.5 , 2, 2.5, 3 VAR)
Designed for activity-oriented experiences for teachers. Each has a subtitle; no subtitle may be repeated for credit. Not approved for credit in the M.Ed.. Prerequisite: graduate standing. (S/U grading) (*) Repeatable

## ED 501 Professional Development for Tchers

(.5, 1, 1.5, 2, 2.5, 3 VAR)

Professional development for teachers. Each has a subtitle; no subtitle may be repeated for credit. Not approved for credit in the M.Ed. Prerequisite: graduate standing. (F,S,SS) Repeatable

## ED 502 Teacher as Change Agent 3(3-0)

Introduces strategies for professional growth including interpretation of research and professional collaboration. Prerequisite: admission to Graduate Program, teaching license. (F,S)

ED 503 Teacher as Researcher 3(3-0)
Develops skills at conducting and applying action research strategies to improve teaching and learning. Prerequisite: admission to Graduate Program, teaching license, ED 502. (F,S)

ED 504 Leading Change in America's Schools 3(3-0)
Builds teachers' skills in leading school change. Prerequisite: admission to Graduate Program, teaching license, ED 502. (F,S)

## ED 505 Education Across Cultures 2(2-0)

Analysis of multiculturalism and how the educational process can be adapted to children of diverse cultural backgrounds. Prerequisite: graduate standing. (*)

## ED 506 Behavioral Support 3(3-0)

Prepares teachers to implement individual, classroom-wide and school-wide behavioral supports and interventions. Field experience required. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education. (SS)

ED 507 Levels of Support I 3(3-0)
Prepares teachers to teach students with special needs in inclusive environments, with emphasis on literacy, math, and academic interventions. Requires field experience. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education and beginning reading course. (SS)

## ED 508 Levels of Support II 3(3-0)

Addresses effective instruction for secondary students, including transition planning. Requires field experience. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education and beginning reading course. (F)

ED 509 Levels of Support III 3(3-0)
Focuses on instructional programs for K-12 students with severe learning and behavioral challenges. Requires field experience. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education. (S)

## ED 510 Collaboration in Education 3(3-0)

Supports skills at co-teaching, teaming, and collaboration with teachers, families, paraprofessionals, and others to strengthen student achievement. Requires field experience. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education. (S)

ED 512 Teaching Diverse Learners 3(3-0)
Focuses on legislation for special education, nature of exceptionalities, and meeting the needs of K-12 students, including second language learners; 30 hours field experiences. Prerequisite: graduate standing plus PSYCH 351 or ED 555. (F,S)
ED 514 Teaching K-6 Math 2(2-0)
Focuses on teaching methods, materials, and assessment strategies in math in the elementary school; 30 hours of field experiences. Prerequisite: MATH 361 and graduate standing (*)

ED 520 Educational Media and Technology 3(3-0)
Prepares teachers to use technology for instruction, assessment, management, and research. Prerequisite: graduate standing. ( $F, S, S S$ )
ED 521 Classroom Integration of Internet 2(2-0)
Methods to effectively and legally integrate the Internet into the classroom as a communication and instructional tool. Prerequisite: ED 280/520, admission to Education, completion of a teaching program, or instructor approval, graduate standing. ( $\mathrm{F}, \mathrm{S}$ )

ED 522 Issues in Education 2(2-0)
Contemporary problems in education, their historical development and philosophical implications. Prerequisite: graduate standing. (*) Repeatable

ED 523 Teaching and Managing Technology 3(3-0)
Strategies, processes, and procedures for managing technology in K-12, including efficient use of emerging pedagogies. Field experience required. Prerequisite: ED 280/520, admission to Education, completion of a teaching program, or instructor approval, graduate standing. (F,S)

ED 524 Advanced Techniques of Teaching Elementary Social Studies 2(2-0)
Analysis of techniques for conceptual approaches to teaching socialization skills, critical thinking and inquiry skills; and helping children develop healthy attitudes and values. Prerequisite: graduate standing. (*)

ED 525 Advanced Techniques of Teaching Elementary Science and Health 2(2-0)
Emphasis on the newest concepts, techniques and materials for teaching elementary school science and health. Prerequisite: graduate standing. (*)

ED 526 School Health Curriculum 2(2-0)
Training (by grade level) in the use of by Growing Healthy" the Primary Grades Health Curriculum Project and the School Health Curriculum Project. This is lateral spread training only, by agreement with the Rocky Mountain Regional Training Center. Prerequisite: graduate standing. (*)

ED 527 Productivity Tools for Classroom 1(1-0)
Applications of Microsoft Office as a productivity tool, including integration of use in classroom. Field experience required. Prerequisite: ED 280/520, admission to Education, completion of a teaching program, or instructor approval, graduate standing. (F,S)

ED 528 Integration of Educational Software 1(1-0)
Familiarity with and criteria for selecting evaluating, and using quality educational software. Field experience required. Prerequisite: ED 280/520, admission to Education, completion of a teaching program, or instructor approval, graduate standing. ( $\mathrm{F}, \mathrm{S}$ )

## ED 529 Literacy \& Technology 3(3-0)

Methods for using technology to assess and teach literacy. Field experience required. Prerequisite: ED 280/520, admission to Education, completion of a teaching program, or instructor approval, graduate standing. (F,S)

ED 530 Instructional Programming 2(2-0)
Principles of curriculum design, educational goals, instructional objectives, and developing long- middle- and short-range plans. For elementary and secondary teachers. Prerequisite: graduate standing. (*)

ED 531 Diverse Learners \& Technology 3(3-0)
Strategies for using technology to enhance learning for all students, with emphasis on the relationship between technology and equity. Field experience required. Prerequisite; ED 280/520, admission to Education, completion of a teaching program, or instructor permission, graduate standing. ( $\mathrm{F}, \mathrm{S}$ )

ED 532 Hardware \& Networking for Educators 3(3-0)
Pedagogical and practical considerations in using networking and hardware in schools. Prerequisite: ED 280/520, graduate standing. (SS)
ED 533 Instructional Theory \& Tech Design 3(3-0)
Instructional system design theories and models and their adaptation to plan and use technology effectively in the classroom. Field experience required. Prerequisite: ED 280/520, admission to Education, completion of a teaching program, or instructor permission, graduate standing. (F,S)

ED 534 Multimedia Design 3(3-0)
Methods and tools for creating multimedia learning objects for K-12 classrooms. Field experience required. Prerequisite: ED 280/520, admission to Education, completion of a teaching program, or instructor approval, graduate standing. (SS)

ED 536 Technology \& Assessment Tools 3(3-0)
Prepares teachers to use technology in assessment practices in the classroom. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education. (SS)

ED 542 Contemporary Techniques of Classroom Management 2(2-0)
What research and professional practice say about organizing students, space, information, and resources; motivating, goal setting, communicating, and problem solving with student; and handling disruption and behavior problems. (*)

ED 544 Teaching Secondary Science 3(3-0)
Focuses on teaching methods, materials, and assessment strategies necessary to prepare students to teach in secondary standards-based science classrooms. Prerequisite: graduate standing. (F)

ED 545 Assessment \& Data Driven Instruction 3(3-0)
Prepares teachers to select, administer, and interpret formal and informal assessments to improve instruction. Requires field experience. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education. (F)

## ED 546 Teaching K-12 Art 3(3-0)

Focuses on Art curriculum, methods, and assessment to prepare art educators to successfully teach in K-12 standardsbased art classrooms. Prerequisite: graduate standing. (F)

ED 547 Teaching English in Secondary Schools 3(3-0) Familiarizes students with Colorado Language Arts Standards, standards-based lesson and unit planning and authentic assessment. Prerequisite: graduate standing. (F)

ED 548 Teaching Foreign Language 3(3-0)
Familiarizes students with Colorado Foreign Language Standards, standards-based lesson and unit planning and authentic assessment. Prerequisite: graduate standing. (F)

ED 550 K-12 Music Methods 3(3-0)
Familiarization with the Colorado Music Content Standards. Standards based lesson and unit planning and strategies for general, instrumental, and vocal music will be emphasized. Prerequisite: graduate standing. (F)

ED 551 Teaching Secondary Social Studies 3(3-0)
Familiarizes students with Colorado Social Studies Content Standards, standards-based lesson and unit planning strategies and authentic assessment. Prerequisite: graduate standing. (F)

ED 552 Teaching Secondary Business 3(3-0)
Prepares teachers to teach all areas of the business curriculum in secondary schools. Prerequisite: admission to Teacher in Residency Program or admission to Teacher Education and graduate standing. (*)
ED 555 Foundations of Learning Disorders 3(3-0)
Exceptionalities: emphasis on high-incidence handicaps. Includes recent legislation and identification, referral, staffing and placement procedures. Major intervention strategies examined. Prerequisite: graduate standing. (*)
ED 560 Professional Development in Curriculum and Instruction (1-3 VAR)
Stresses skill-building in classroom instruction, including curriculum development and student assessment. Current innovations in public education are also addressed. Prerequisite: graduate standing. (*)

ED 570 The Technology Coordinator 3(3-0)
Examination of the roles of the technology coordinator in a K-12 educational setting. Prerequisite: ED 280/520 or completion of a beginning course in instructional technology; completion of a teaching program or instructor approval, graduate standing; completion of ED 532 is strongly recommended. (*)

## ED 571 Distance Learning 3(3-0)

Provides information needed to be knowledgeable distance educators and instructional developers for K-12 distance learning. Prerequisite: ED $280 / 520$ or completion of a beginning course in instructional technology; completion of a teaching program or instructor approval, graduate standing. *)

## ED 572 Teaching Early Childhood 3(3-0)

Methods for teaching literacy, math, motor and social skills, science, and social studies in early childhood. Prerequisite: admission to Teacher Education or graduate standing and completion of a teaching program. (*)

ED 573 Creative Arts in Early Childhood 3(3-0)
Exploration of principles and methods for teaching music, movement, visual arts and dramatic play in early childhood. Prerequisite: admission to Teacher Education or graduate standing and completion of a teaching program. (*)

ED 574 Early Childhood Space Exploration 3(3-0)
Designed to provide tools necessary to teach space concepts through inquiry-based learning to young children. Prerequisite: completion of a teaching program. (*)

## ED 575 Lunar/Mars Exploration 3(3-0)

Participants will investigate how to establish and maintain humans on our moon or Mars and how to integrate these concepts into the classroom. Prerequisite: completion of a teaching program. (*)

## ED 576 Rocketry and Exploration 3(3-0)

Participants will examine the technological advances that are being developed for human exploration of the solar system. Prerequisite: completion of a teaching program. (*)

## ED 577 Astronomy for the Classroom 3(3-0)

Participants will investigate topics such as motions of the heavens, astronomical research tools, stars, and constellations, 3D exploration of comets, auroras, and planets. Prerequisite: completion of a teaching program. (*)
ED 578 Long Term Space Travel 3(3-0)
Participants will investigate answers to how humans can expand beyond home to maximize the benefits from space exploration. Prerequisite: completion of a teaching program. (*)

ED 579 Earth Systems Science 3(3-0)
Participants will investigate answers to how humans can expand beyond home to maximize the benefits from space $\underset{\left({ }^{*}\right)}{ }$ exploration. Prerequisite: completion of a teaching program. (*)

ED 580 Integrated Methods 3(3-0)
Prepares elementary teachers to teach Social Studies, with emphasis on integration of the expressive arts and PE. Prerequisite: graduate standing. (*)

ED 581 Practicum \& Seminar in Education (1-6 VAR)
Supervised practicum and seminar in second teaching or endorsement area. Prerequisite: admission to Education, graduate standing. (F,S,SS) Repeatable
ED 591 Special Topics (1-3 VAR)
Prerequisite: graduate standing. (*) Repeatable
ED 592 Research (1-3 VAR)
Prerequisite: graduate standing and permission of graduate adviser. (*) Repeatable

ED 593 Seminar (1-6 VAR)
Prerequisite: graduate standing. (*) Repeatable
ED 594 Field Experience (1-3 VAR)
Field experience in an educational setting. Prerequisite: graduate standing. (F,S,SS) Repeatable
ED 595 Independent Study (1-3 VAR)
Prerequisite: graduate standing and permission of graduate adviser. (*) Repeatable

ED 599 Thesis Research (1-6 VAR) (*) Repeatable

## ELECTRICAL ENGINEERING (EE) UNDERGRADUATE COURSES

EE 100 Electrical Engineering Fundamentals 3(3-0)
Electrical engineering fundamentals and problem solving using design and visualization tools. (F)

EE 102 Digital Circuit Logic 4(3-2)
Boolean algebra, Karnaugh maps, multiplexers, decoders, ROMs, PLAs, flip-flops, counters, sequential networks, state tables. Prerequisite: High school physics. (S)
EE 201 Circuit Theory 3(2-2)
Basic circuit analysis techniques and applications to engineering design problems. Corequisite: MATH 224, PHYS 222. (F)

## EE 202 Circuit Theory Applications 4(3-3)

Step and Sinusoidal Response of networks; modeling of active devices. Prerequisite: EE 201. (S)

EE 251 Introduction to Microprocessors 4(3-3)
Microprocessor organization assembly language, I/O techniques, real time interfaces, applications, hardware/ software. Prerequisite: EE 102. (S)

## ENGINEERING (EN)

## UNDERGRADUATE COURSES

EN 101 Introduction to Engineering 2(2-0)
Introduction to engineering curriculum and careers. Problem solving and creativity. Spreadsheets, word processing and other computer skills. (F,S)

EN 103 Problem Solving for Engineers 3(2-2)
Writing computer programs to solve real-world problems in engineering and science. Prerequisite: MATH 121. (F,S)

EN 107 Engineering Graphics 2(1-2)
Introduction to the preparation of engineering drawings using freehand sketching and computer graphics software. (F,S)

EN 187 Success in Engineering and Science 1(1-0)
Introduction to study skills needed to succeed in engineering and science classes and to careers in engineering and science. (SS)
EN 211 Engineering Mechanics I 3(3-0)
Introduction to the relationship between forces and moments acting on an object that is in equilibrium (statics). Prerequisite: PHYS 221, EN 103. Corequisite: MATH 207. (F)
EN 212 Engineering Mechanics II 3(3-0)
Introduction to the relationship between forces and moments acting on rigid objects and the motion of objects (dynamics). Prerequisite: EN 211. (S)

EN 215 Introduction to Industrial and Systems Engineering 3(3-0)
Engineering viewpoints of the principles of organization for production and the operations applicable to accomplishing organizational responsibilities. Prerequisite: pre-completion of Quantitative Skills Component. (F)

EN 231 Circuit Analysis I 4(4-0)
Circuit concepts, conventions and network equations. Initial conditions and classical methods of obtaining transient and steady-state solutions. Prerequisite: MATH 224. Corequisite: EN 231L, PHYS 222, and MATH 207. (F)

EN 231L Circuit Analysis I Lab 1(0-2)
Observation and analysis of electrical circuits involving resistance, inductance and capacitance. Corequisite: EN 231. (F)

EN 232 Circuit Analysis II 4(4-0)
Continuation of EN 231 including waveform synthesis, network theorems, Fourier series, pole-zero diagrams and two-port network theory. Introduction to Laplace transforms. Prerequisite: EN 231. (*)

EN 260 Basic Electronics 2(2-0)
Characteristics, operation, and basic circuits of solid-state devices. Operational amplifiers with typical applications are also introduced. Prerequisite: EN 231. (S)

EN 263 Electromechanical Devices 3(3-0)
DC and AC motors and generators, transformers, stepper motors, servomotors and various sensors: theory, device characteristics, applications and controls. Prerequisite: EN 103, EN 231. Corequisite: EN 212, EN 260. (S)

## EN 291 Special Topics (1-5 VAR)

Selected topics in engineering. (*) Repeatable
EN 292 Research (1-6 VAR)
Research closely supervised by a faculty member with regular meetings. (*) Repeatable

EN 295 Independent Study (1-5 VAR)
Intensive study directed by a faculty member. (*) Repeatable
EN 296 Cooperative Education Placement (1-5 VAR)
Work experience under direction of a field supervisor and a faculty member. Prerequisite: freshman or sophomore standing. (F,S) Repeatable

EN 298 Internship (1-6 VAR)
Field work in a company or organization, with written reports. (S/U grading) (*) Repeatable

EN 301 Fluid Mechanics 4(4-0)
Introduction to the relationship between the forces applied to a fluid, the motion of the fluid, and the mechanical properties of the fluid. Prerequisite: EN 212. (*)

EN 321 Thermodynamics 3(3-0)
Introduction to energy equations and flows, entropy, kinetic theory and statistical mechanics, second law of thermodynamics, heat engines and heat transfer. Prerequisite: PHYS 221. (F)

EN 324 Materials Science and Engineering 3(3-0)
Fundamentals of chemical structure and atomic bonding, material properties, deformations under force, stress-strain relationships, selection of materials. Prerequisite: EN 211 and high school chemistry. Corequisite: EN 324L. (S)
EN 324L Materials Science and Engineering Lab 1(0-2) Measurements of material properties and stress-strain relationships. Prerequisite: EN 211. Corequisite: EN 324. (S)

EN 343 Engineering Economy 3(3-0)
Modeling, analysis and decision making involving time value of money, depreciation, income taxes and replacement analysis. Prerequisite: college algebra. (F)

EN 351 Heat Transfer 3(3-0)
Steady and unsteady conduction of heat. Convection heat transfer in boundary layer and duct flows. Forced and free convection. Thermal radiation. Prerequisite: EN 321. (*)
EN 360 Control Systems I 2(2-0)
Linear analog control systems theory is introduced. Open and closed-loop systems are examined, and performance characteristics are analyzed. Prerequisite: EN 260, MATH 337. Corequisite: EN 360L. (F)

EN 360L Control Systems I Lab 1(0-2)
Corequisite: EN 360. (F)
EN 361 Digital Electronics 3(3-0)
Introduction to digital technology emphasizing practical microprocessors. Number systems and codes, truth tables, Boolean functions, combinational and sequential logic, registers, counters, memory devices, and microprocessors. Prerequisite: EN 260. Corequisite: EN 361L. (F)
EN 361L Digital Electronics Lab 1(0-2)
Corequisite: EN 361. (F)
EN 362 Introduction to Mechatronics 2(2-0)
Elements of a mechatronics system: signal conditioning, sensors, actuators, microcontrollers, and software. Prerequisite: EN 263. Corequisite: EN 362L. (F)
EN 362L Mechatronics Lab 1(0-2)
Corequisite: EN 362. (F)

## EN 363 Virtual Machine Design 2(2-0)

Computer aided design of machines including mechanical components: shaft systems, power transmission, and motion generation. Prerequisite: EN 324, EN 362. Corequisite: EN 363L. (S)

EN 363L Virtual Machine Design Lab 1(0-2)
Corequisite: EN 363. (S)
EN 365 Stochastic Systems Engineering 4(4-0)
Probability modeling and statistical analysis of engineering systems containing elements of uncertainty. Prerequisite: MATH 126. (F)

## EN 420 Simulation Experiments 4(3-2)

Design and statistical analysis of experiments using discrete event simulation models. Prerequisite: EN 365. (S)

EN 430 Project Planning and Control 3(3-0)
Engineering project management including project selection, organization, planning, and budgeting. Project evaluation, tracking and control, and scheduling and resource allocation, including PERT and CPM. Prerequisite: EN 365. (F)

EN 435 Microprocessor Control Systems 3(2-2)
Components of a microprocessor control system, digital processing, survey of state-of-the-art micro-processor control systems. Prerequisite: EN 360. (*)

EN 439 Time and Motion Studies 2(1-2)
Principles and techniques of methods analysis and work measurement, human performance in human-machine systems. Corequisite: EN 215, EN 365. (F)

EN 440 Safety Engineering 3(3-0)
Occupational safety and health in different industrial environments. Theories of accident causation, governmental regulation, mechanical, electrical and environmental hazards, protective equipment, hazard analysis, safety programs design and administration, systems safety, etc. Prerequisite: EN 343 and 439. (F)

EN 441 Engineering of Manufacturing Processes 3(3-0) Materials and processes for manufacturing including machining, casting, and forming processes: design, modeling and control. Prerequisite: EN 212. Corequisite: EN 441L. (S)
EN 441L Engineering \& Manufacturing Proc Lab 1(0-2) Corequisite: EN 441. (S)
EN 442 Manufacturing Processes II 3(3-0)
Materials and processes for manufacturing including sheet metal forming, welding, machining and advanced manufacturing processes. Prerequisite: EN 342. (*)

EN 443 Quality Control and Reliability 3(3-0)
Principles and methods of quality control and improvement. Quality management strategy: design and implementation of quality programs in organizations, problem solving techniques, quality improvement tools, etc. Statistical quality control: control charts, process capability evaluation, acceptance sampling procedures, etc. Prerequisite: EN 365. (S)

## EN 460 Control Systems II 2(2-0)

Advanced control systems analysis, including microprocessorbased control systems analysis, A/D and D/A converters, Z transforms, and stepper motors. Prerequisite: EN 360, EN 361. Corequisite: EN 460L. (S)

EN 460L Control Systems II Lab 1(0-2)
Corequisite: EN 460. (S)
EN 462 Industrial Robotics 2(2-0)
Basic robotics principles; robot interfacing; robot controls and programming. Laboratory exercises use various robots to meet specific industrial tasks. Prerequisite: EN 460, EN 473. Corequisite: EN 462L. (S)

## EN 462L Industrial Robotics Lab 1(0-2)

Corequisite: EN 462. (S)
EN 471 Operations Research 3(3-0)
Techniques for analysis and solution of problems in industrial and management systems. Linear programming, duality theory, sensitivity analysis, and network analysis techniques. Prerequisite: MATH 207, 224. (F)

EN 473 Computer Integrated Manufacturing 2(2-0)
Engineering design, modeling and applications in production: automation, flowlines, robotics, numerical control, and computer usage in manufacturing. Prerequisite: EN 103, 231, 231L, 441 and MATH 207. Corequisite: EN 473L. (F)

EN 473L Computer Integrated Mfg Lab 1(0-2)
Corequisite: EN 473. (F)
EN 475 Facility, Planning and Design 3(3-0)
Application of industrial and systems engineering techniques to problems related to an organization's physical resources. Facilities planning and plant layout, material handling, site selection and facilities location. Corequisite: EN 471. (F)

EN 477 Operations Planning and Control 3(3-0)
Techniques for analysis and management of manufacturing operations and production with emphasis on inventory systems and forecasting. Prerequisite: EN 471 or permission of instructor. (S)

EN 486 Senior Seminar 2(2-0)
Steps in the engineering design process including creativity, technical analysis, and presentations. Prepare for senior project. Prerequisite: permission of instructor. (S/U grading) ( $\mathrm{F}, \mathrm{S}$ )
EN 487 Engineering Design 3(3-0)
Application of engineering principles to a design project. Prerequisite: EN 486. (S)

EN 488 Industrial Engineering Design 3(3-0)
Application of engineering principles to a design project. Prerequisite: EN 486. (S)
EN 491 Special Topics (1-5 VAR)
Prerequisite: junior standing. (*) Repeatable

## EN 492 Research (1-6 VAR)

Faculty directed research project. Prerequisite: junior or senior standing. (*) Repeatable

EN 495 Independent Study (1-5 VAR)
Prerequisite: junior standing. (*) Repeatable
EN 496 Cooperative Education Placement (1-5 VAR)
Work experience under the direction of a field supervisor and a faculty member. Prerequisite: junior or senior standing. (F,S) Repeatable

EN 498 Internship (1-6 VAR)
Field work in a company or organization, with written reports.
Prerequisite: junior or senior standing. (S/U grading) (*)
Repeatable

## GRADUATE COURSES

EN 503 Ergonomics 3(3-0)
Theory and practice of human performance measurement and human factors engineering. Study of human sensory, perceptual mental, psychomotor, and other characteristics applied to the design of human-machine systems for performance effectiveness, productivity and safety. Prerequisite: EN 440 and graduate standing. (S)

## EN 504 Scheduling and Sequencing 3(3-0)

Theory of deterministic scheduling and sequencing with stochastic extensions. An introduction to the complexity of computations in systems varying from single machine to job shop. Prerequisite: EN 571 or permission of instructor. (S)

EN 507 Virtual Reality 3(3-0)
Principles, practical aspects, and applications of virtual reality systems and components such as 3D interfaces, displays (3D, visual, haptic, auditory), position tracking, and virtual environments. Prerequisite: graduate standing. (F)

EN 511 Structural Engineering 3(3-0)
Design and analysis of wood, steel and concrete structures in railroad application. Prerequisite: graduate standing. (F)

EN 513 Artificial Intelligence 3(3-0)
Topics in artificial intelligence including predicate calculus, search strategies, and machine learning with applications. Prerequisite: graduate standing. (F)

EN 520 Simulation Experiments 4(3-2)
Design and statistical analysis of experiments using discrete event simulation models. Prerequisite: EN 365 and graduate standing. (S)

EN 530 Project Planning and Control 3(3-0)
Engineering project management including project selection, organization, planning, and budgeting. Project evaluation, tracking and control, and scheduling and resource allocation, including PERT and CPM Prerequisite: graduate standing. (F)

EN 531 Railroad Power Systems 3(3-0)
Comprehensive analysis and design of electric power systems for railroads including power supplies, AC/DC and linear motors, third rails, catenaries, and substations/ distribution systems. Prerequisite: graduate standing. (S)

EN 540 Advanced Engineering Economics 3(3-0)
Advanced topics in engineering economy featuring income tax consideration, treatment of inflation, risk and uncertainty models, cost-effectiveness concepts, and project comparison methods. Prerequisite: EN 343, or permission of instructor. (S)

EN 551 Fleet Management 3(3-0)
Fleet management business and economics, risk analysis, information systems, vehicle planning and control, productivity, safety, and environmental compliance. Prerequisite: EN 530. Corequisite: EN 577. (F)

EN 552 Vehicle Dynamics 3(3-0)
Fundamental dynamic considerations in designing ground vehicles and vehicle control systems. Rail systems as an example of modeling dynamic systems at various levels of abstraction. (F)

## EN 556 (MATH 556) Design and Analysis of Experiments 3(3-0)

Foundations of experimental design, outline efficient methods to implement experiments, develop statistical methods to sort signal from noise, and analyze information derived from the experiment. Prerequisite: MATH 256 and 356. (SS)
EN 560 Advanced Controls 3(3-0)
State-space based analysis/design of linear control systems are introduced in both continuous- and discrete-time domains. Nonlinear systems and the linearization method are covered. Prerequisite: graduate standing. Corequisite: EN 460. (S)

EN 562 Intelligent Robotics 3(3-0)
Theoretical and practical aspects of advanced robotic topics such as trajectory generation, path planning and control, decision logic, advanced sensors, autonomous mobile robots, and humanoids. Prerequisite: graduate standing. (S)

EN 565 Stochastic Systems Engineering 3(3-0)
Analysis and design of systems containing elements of uncertainty in demand and performance capability. Time varying measures and approximations are emphasized. Additional work required of graduate students. Prerequisite: MATH 256 and 356. (*)

EN 571 Operations Research 3(3-0)
Techniques for analysis and solution of problems in industrial and management systems. Linear programming, duality theory, sensitivity analysis, and network analysis techniques. Prerequisite: MATH 224 and graduate standing. (F)

## EN 575 Facility Planning and Design 3(3-0)

Application of industrial and systems engineering techniques to problems related to an organization's physical resources. Facilities planning, plant layout, material handling, site selection and location. Corequisite: EN 571. (F)

EN 577 Operations Planning and Control 3(3-0)
Techniques for analysis and management of manufacturing operations and production with emphasis on inventory systems and forecasting. Prerequisite: EN 571 or permission of instructor. (S)
EN 587 Career Success in Engineering 1(1-0)
Topics related to identifying an appropriate career path, finding a job, and planning for graduate school. (F,S)

EN 588 Graduate Projects 3(3-0)
Application of graduate industrial engineering principles to a capstone design project. Prerequisite: EN 520, 571, 575, \& 577. (*) Repeatable

EN 590 Special Projects (1-3 VAR)
Individual project selected, outlined and pursued by student. May be repeated. Prerequisite: graduate standing and advisor approval. (*) Repeatable
EN 591 Special Topics (1-3 VAR)
Selected topics in industrial and systems engineering. Heuristic design, reliability, industrial ergonomics, multicriteria decision analysis, analytical facility location and site selection models. Not every topic offered each year. May be repeated. Prerequisite: Permission of instructor. (S) Repeatable

## EN 593 Graduate Seminar 2(2-0)

Seminar for students entering the systems engineering program. Philosophical, methodological and ethical issues in systems engineering are discussed. Prerequisite: Permission of instructor. (S/U grading) (F)

EN 595 Independent Study (1-5 VAR)
Prerequisite: graduate standing. (*) Repeatable
EN 598 Internship (1-6 VAR)
Field work in a company or organization, with written reports. (S/U grading) (*) Repeatable

## EN 599 Thesis Research (1-9 VAR)

Preparation of thesis to meet degree requirements. Arranged with major adviser. May be repeated. Prerequisite: graduate standing and adviser approval. (S/U grading) (F,S) Repeatable (6)

## ENGLISH (ENG)

## UNDERGRADUATE COURSES

ENG 099 Foundational Practices in Writing 3(3-0)
Reading and writing assignments introducing argumentation, analysis, and synthesis. Practice in essay writing stressing thesis construction, organization, and development. Does not count toward graduation. (S/U grading) (F,S)

## ENG 100 English as a Second Language (3-12 VAR)

Intensive practice in English Language skills with an emphasis on writing for non-native speakers of English. (*) Repeatable (12)

ENG 101 Composition I 3(3-0)
Emphasis on critical thinking, reading, and writing clear and coherent essays that reflect an understanding of the writing process, rhetorical analysis, argumentation, and academic discourse. Prerequisite: English 099, or ACT verbal score of at least 18, or SAT verbal score of at least 440, or an Accuplacer test score of at least 95. (F,S,SS)

ENG 102 Composition II 3(3-0)
Sequential course providing continued engagement with critical thinking, reading, argumentation, and using rhetorical techniques in academic writing. Emphasis on research strategies. Prerequisite: ENG 101. (F,S,SS)

ENG 106 (ANTHR 106) Language, Thought and Culture 3(3-0)
Cross-cultural introduction to language processes in human society. (*)

ENG 111 Intro to American Academic Discourse 3(3-0)
Practical introduction to American academic discourse and culture for international students, stressing oral and written discussion skills. (*)

ENG 114 Introduction to Creative Writing 3(3-0)
An introduction to poetry, fiction, and creative non-fiction writing, stressing honest and clear writing and heightened critical thinking skills within a workshop setting. (F,S,SS)
ENG 130 Introduction to Literature 3(3-0)
Introduction to the three major literary genres: fiction, poetry, and drama. The main emphasis is on close reading and textual analysis. (*)
ENG 161 Careers for English Majors 1(1-0) Identifies career options and presents employment opportunities for English majors. (*)

ENG 201 Introduction to Literary Study 3(3-0)
Introduction to literary genres, major periods and writers, close reading and textual analysis, modern literary criticism, and research methods. Prerequisite: ENG 102. (*)

ENG 210 American Literature I 3(3-0)
Literature and literary history of America to 1865. Prerequisite: ENG 102. (*)
ENG 212 American Literature II 3(3-0)
Literature and literary history of America from 1865 to the present. Prerequisite: ENG 102. (*)

ENG 220 (CS 220) Survey of Chicano Literature 3(3-0)
Survey of outstanding contemporary Chicano works. Literature deals with Chicano themes, including analysis of folklore and myth. (*)
ENG 221 Masterpieces of Literature I 3(3-0)
Significant writings in world literature from the ancients through the Renaissance and their backgrounds. Prerequisite: ENG 102. (*)
ENG 222 Masterpieces of Literature II 3(3-0)
Significant writings in world literature from the seventeenth century to the present and their backgrounds. Prerequisite: ENG 102. (*)

ENG 231 Literature of England I 3(3-0)
Literature and literary history of England from the AngloSaxon Period through the 18th Century. Prerequisite: ENG 102. (*)

ENG 232 Literature of England II 3(3-0)
Literature and literary history of England in the Romantic, Victorian and Modern Periods. Prerequisite: ENG 102. (*)

ENG 240 Survey of Ethnic Literature 3(3-0)
This course provides an introduction to the literature of four major ethnic groups in the U.S.: Native American, African American, Chicano, and Asian American. Prerequisite: ENG 101. (*)

ENG 251 Traditional Grammar Theory 3(3-0)
Primarily for non-majors who wish to improve their understanding of how language works, for teacher education majors, and for English majors who want additional background for advanced language courses. Prerequisite: ENG 102. (*)
ENG 254 Literature of Science Fiction 3(3-0)
Imaginative literature of fact and fiction, reading, lectures, movies, and television. (*)

ENG 291 Special Topics (1-3 VAR) (*) Repeatable
ENG 303 Advanced Composition 3(3-0)
Advanced persuasive writing, including rhetoric and grammar. Prerequisite: ENG 102. (*)

## ENG 304 History and Theory of Rhetoric 3(3-0)

Acquaints students with a range of classical and contemporary theories for writing persuasive prose. Research and critical analysis are supplemented by readings of contemporary essays. Prerequisite: ENG 101, ENG 102. (*)

ENG 305 Technical and Scientific Report Writing 3(3-0) Emphasis on discrete professional formats and styles in writing manuals, proposals, government contracts and reports. For upperclassmen in technical and professional fields. Prerequisite: ENG 102. (*)
ENG 306 Visual Rhetoric 3(3-0)
Rhetorical analysis through visual modes of communication; creation and manipulation of visual messages for a variety of audiences, purposes, situations. Prerequisite: ENG 201. (*)

ENG 307 Poetry 3(3-0)
Poetry as a genre; prosody and techniques of fixed-form and free verse; poetic traditions from ancient to contemporary; poetic theory and criticism. Prerequisite: ENG 201. (*)

## ENG 308 Fiction 3(3-0)

Prose fiction as a genre, including the modern short story and representative novels from 1700 to the present. Prerequisite: ENG 201. (*)

ENG 309 Drama 3(3-0)
Drama as a literary genre; representative works from the ancient, medieval, Renaissance, modern, and contemporary traditions; historical, theatrical, and critical contexts. Prerequisite: ENG 201. (*)

ENG 309L Drama on Screen 1(0-1)
Provides students the opportunity to see filmed performances of plays studied in ENG 309, spanning 2,500 years of dramatic history. Corequisite: ENG 309 recommend. (*)

ENG 310 Advanced Literary Forms \& Genres 3(3-0)
Analyzes published writers, creative writing, and craft through writing based on the study and theory of a specified genre or form. Prerequisite: ENG 201. (*)

ENG 315 Creative Writing: Poetry 3(3-0)
Introduction to writing poetry. A studio workshop for students to grow in their appreciation of poetic processes. Prerequisite: ENG 114. (*)

## ENG 316 Creative Writing: Fiction 3(3-0)

Introduction to creating character, situation, and overall structure, emphasis on imaginative and real-life portrayal. Prerequisite: ENG 114. (*)

ENG 317 Creative Nonfiction 3(3-0)
Introduction to writing the reflective essay. Prerequisite: ENG 114. (*)

ENG 318 Creative Writing: Drama 3(3-0)
Introduction to playwriting. Composition of a one-act play and development of creative and critical thinking through the study of major playwrights. Prerequisite: ENG 114. (*)

ENG 319 Professional Editing 3(3-0)
Acquaints students with current practices in editing/publishing. Students will learn to make texts readable and conform to conventions of editing in a variety of disciplines. Prerequisite: ENG 304. (*)

ENG 320 Literature of Enlight/Revolution 3(3-0)
Literature of Enlightenment and Revolution traces through political, philosophical and literary tracts the cultivation of democratic ideals and the emergence of modern democracies. Prerequisite: ENG 201. (*)

ENG 321 American Romanticism 3(3-0)
A study of the major figures in the development of American Romanticism. Prerequisite: ENG 201. (*)

ENG 322 American Literary Realism, 1870-1910 3(3-0)
A study of the development of Realism and Naturalism in American literature during the late 19th century and the early 20th century. Prerequisite: ENG 201. (*)

ENG 323 Modern American Literature 3(3-0)
A study of major writers' themes, and developments in American literature from the 1910s to the 1960s. Prerequisite: ENG 201. (*)

ENG 324 American Cinema/American Culture 3(3-0)
From early twentieth century to date, a survey of profoundly influential, selected American films, their aesthetic, cultural and technological impacts. (*)

ENG 325 Nature Writing in the West 3(3-0)
Studies in writings about the western landscape and environment by American nature writers; intensive practice in nature writing. (*)
ENG 326 Writing for the WEB 3(3-0)
Writing for the World Wide Web and intranets, including rhetorical approaches, elements of design, and organizing informative sites for education, government, business, and the arts. Prerequisite: ENG 102. (*)

ENG 328 Contemporary American Lit 3(3-0)
Advanced study of a focused topic in contemporary American literature (genre, theme, or set of related texts), in historical, cultural, and critical contexts. Prerequisite: ENG 201. (*)

ENG 330 Modern European Drama 3(3-0)
Survey of major developments in modern European drama. Prerequisite: ENG 201. (*)

ENG 331 Development of the Novel 3(3-0)
Emphasis on social problems and European influences, focus on trends coming to full development in the 20th century. Includes recent works. Prerequisite: ENG 201. (*)

ENG 335 (SPCOM, WS 335) Gender and Communication 3(3-0)
This course examines the ways that gender affects communication behaviors and helps develop an awareness of the processes that affect gender socialization and stereotyping. Prerequisite: ENG 102. (*)

ENG 340 (WS 340) Women in Literature 3(3-0)
Intensive study of literature written by women, in historical, cultural, and critical contexts. Prerequisite: ENG 102. (*)

ENG 345 Multiculturalisms in America 3(3-0)
Creates cultural awareness and critical-thinking through the study of literary, political, and cultural voices within the United States. Provides foundation for multicultural studies across disciplines. Prerequisite: ENG 101, ENG 102. (*)

ENG 351 Children's Literature 2(2-0)
Classic and contemporary children's literature with emphasis on selection and evaluation. Prerequisite: ENG 102. (*)

ENG 352 English Syntax and Usage 3(3-0)
English usage and language systems, emphasis on forms and functions of language analysis. (*)

ENG 353 Language in the USA 3(3-0)
Explores language use in the U.S. and examines current language-related myths and issues in the U.S., including issues related to indigenous languages and immigrant languages. Prerequisite: ENG 102. (*)

ENG 354 Women Writers of Science Fiction 3(3-0)
Classic and contemporary science fiction written by women. (*)
ENG 355 Women Writers of Detective Fiction 3(3-0)
Survey detective fiction by women from Agatha Christie to the present. (*)

ENG 370 Rediscovering the Fairy Tale 3(3-0)
The Fairy Tale: Its history, psychological basis, relationship to mythology, and transformations in poetry, film, music, and visual art. (*)

ENG 371 Medieval English Literature 3(3-0)
Advanced study of a focused topic in medieval literature, (genre, theme, or set of related texts), in historical, cultural, and critical contexts. Prerequisite: ENG 201. (*)

ENG 372 Early Modern English Literature 3(3-0)
Advanced study of a focused topic in early modern English literature, (genre, theme, or set of related texts), in historical, cultural, and critical contexts. Prerequisite: ENG 201. (*)

ENG 373 Restoration \& 18th-C. English Lit 3(3-0)
Advanced study of a focused topic in Restoration and 18thcentury English literature, (genre, theme, set of related texts), in historical, cultural, and critical contexts. Prerequisite: ENG 201. (*)

ENG 374 Romantic \& Victorian English Lit 3(3-0)
Advanced study of a focused topic in Romantic and/or Victorian English literature (genre, theme, or set of related texts), in historical, cultural, and critical contexts. Prerequisite: ENG 201. (*)

ENG 375 Modern \& Contemporary English Lit 3(3-0)
Advanced study of a focused topic in modern and/or contemporary English literature (genre, theme, or set of related texts), in historical, cultural, and critical contexts. Prerequisite: ENG 201. (*)

ENG 381 Shakespeare 3(3-0)
Representative works in various genres, with attention to cultural and critical contexts. Prerequisite: ENG 102. (*)

ENG 381L Shakespeare on Screen 1(0-2)
Viewing and study of Shakespeare's plays in video and film versions. (*)

ENG 384 Studies in Major Writers 3(3-0)
Intensive study of a major writer or writers in historical, cultural, and critical contexts. Prerequisite: ENG 201. (*)

## ENG 385 Literacy Criticism and Theory 3(3-0)

Traditional and contemporary critical theories of literature and their applications. Prerequisite: ENG 201. (F)

ENG 391 Special Topics (1-3 VAR)
Prerequisite: ENG 102 or permission of instructor. (*) Repeatable

ENG 404 Writing in the Professions 3(3-0)
Advances course in writing that emphasizes the analysis and creation of documents used in diverse professional settings. Prerequisite: ENG 201. (*)

ENG 412 Literature for Adolescents 2(2-0)
Literature suitable for adolescents, including classical and contemporary authors, and issues in selection and evaluation. Prerequisite: ENG 102. (*)

ENG 414 Advanced Writing Workshop 3(3-0)
Development of students' best writings in workshop format in preparation for graduate school and/or publication. A genrespecific focus is required upon enrollment. Prerequisite: ENG 114 and ENG 315, 316, 317, or 318. (S)

ENG 424 Novels into Film 1740-Present 3(2-2)
Comparative study of great novels, 1740 -present, and film versions of those novels. (*)
ENG 440 (MCCNM 440) Magazine Writing 3(3-0)
Instruction and practice in writing nonfiction magazine articles with emphasis on story research and market selection. Prerequisite: ENG 303 or 317 or permission of instructor. (*)

ENG 441 Chaucer and His Age 3(3-0)
Chaucer and his contemporaries in their cultural and historical setting. Prerequisite: ENG 201 or ENG 102 and HIST 102. (*)

ENG 445 Magazine Editing and Production 3(3-0)
Writing, editing, and design for printing and Web publication of a general-circulation regional magazine. Prerequisite: ENG 440 or MCCNM 304 or 311 or 440 or permission of the instructor. (*)

ENG 452 History of the English Language 3(3-0)
English language from Anglo-Saxon period to present; emphasis on history linguistic and structural changes. Prerequisite: ENG 251 or ENG 303 or ENG 352. (*)

ENG 461 Careers for English Majors 1(1-0)
Identifies and explores graduate school and employment opportunities. (*)
ENG 491 Special Topics (1-3 VAR) (*) Repeatable
ENG 493 Senior Seminar 3(3-0)
In-depth analysis of specific topics, themes, authors, and works in American, English or world literature. Prerequisite: ENG 385. (*)

ENG 494 Field Experience (1-5 VAR)
A semester-long internship. Student performs professional duties using English-related skills required by the cooperating agencies. (*) Repeatable
ENG 495 Independent Study (1-3 VAR)
Directed, intensive study and guidance in studying major literary figures or movements, arranged with the chair of the department. (*) Repeatable

## GRADUATE COURSES

ENG 500 Workshop (1-3 VAR)
Individually subtitled professional development workshops, designed for teachers, focused on writing, reading, and pedagogical development. Prerequisite: graduate standing. (*)

## ENG 501 Theories of Writing 3(3-0)

Provides an introduction to and survey of modern writing theory. The course prepares students to apply theoretical principles to the practical concerns of writing pedagogy. Corequisite: ENG 502. (F)

ENG 502 Research Methods 3(3-0)
Introduces students to diverse opportunities for research methodology and academic discourse in English studies. Corequisite: ENG 501. (F)
ENG 503 Literary Theory 3(3-0)
An introduction to contemporary literary and critical theory in English studies. Prerequisite: ENG 501, ENG 502. (S)

ENG 511 Major Authors 3(3-0)
Intensive study of the works of one or two major authors.
Prerequisite: ENG 501, ENG 502. (*) Repeatable
ENG 512 Literature Survey 3(3-0)
Synthesis of literary attitudes, modes, genres of an age. Prerequisite: ENG 501, ENG 502. (*) Repeatable

ENG 521 Language, Literacy, \& Learning 3(3-0)
Language, Literacy, and Learning begins with exploration of the nature of literacy in U.S. society, drawing upon historical and current studies and theories of literacy. Prerequisite: ENG 501, ENG 502. (*)

ENG 522 Phonology \& Morphology for ESL/EFL 3(3-0)
Introduction to English phonology, morphology, and morphosyntax relevant to ESL/EFL teaching. Prerequisite: ENG 501, ENG 502. (*)

ENG 523 Syntax for ESL/EFL 3(3-0)
Introduction to English syntactic structures relevant to ESL/EFL teaching. Includes an examination of core English structures from various perspectives. Prerequisite: ENG 501, ENG 502. (*)

ENG 524 Teaching ESL/EFL 3(3-0)
Introduction to the teaching of English to non-native speakers. No specific types of students are emphasized; includes teaching of adults and children in various settings. Prerequisite: ENG 501, ENG 502. (*)

ENG 525 Computers \& Composition 3(3-0)
Exploration of the impact of computers and computer networks on writing and the teaching of writing. Prerequisite: ENG 501, ENG 502. (*)

ENG 527 Graduate Writing Workshop 3(3-0)
Group discussion of original student work, emphasizing plot, characterization, style, structure, and theory. Prerequisite: ENG 501, ENG 502. (*) Repeatable
ENG 528 Non-Fiction Workshop 3(3-0)
Development of students' best writings in workshop format in preparation for publication. Prerequisite: ENG 501, ENG 502. (*) Repeatable
ENG 553 Language in the USA 3(3-0)
Explores language use in the U.S. and examines current language-related myths and issues in the U.S., including issues related to indigenous languages and immigrant languages. Prerequisite: ENG 102. (*)

ENG 560 Language Acquisition \& Linguistics 3(3-0)
Development of English language from childhood through adulthood, including phonology, grammar, vocabulary, and communicative competence. Acquisition of English as a second language. (S)

ENG 578 Workshop in the Teaching of Writing 3(3-0)
Theories of composition, methods, sources and resources for teachers of writing. Prerequisite: graduate standing. (*)

## ENG 591 Special Topics 3(3-0)

Varied topics covering cultural or historical areas, or literacy and discourse theory and practice, or professional pedagogical issues. Prerequisite: ENG 501, ENG 502. (*) Repeatable

ENG 594 Field Experience 3(3-0)
Designed to prepare students for, and support them through their first semester as a teaching assistant at CSU-Pueblo. Prerequisite: ENG 501, ENG 502, and approval of instructor. (*) Repeatable

ENG 595 Independent Study (1-5 VAR)
Students will work with a professor in the department in order to create a rigorous course schedule on a topic of their choosing. Prerequisite: ENG 501, ENG 502, and approval of instructor. (*) Repeatable

ENG 598 Internship (1-5 VAR)
Students who have sought and received an internship in the field of English studies will work with their advisor in order to set expectations. Prerequisite: ENG 501, ENG 502, and approval of instructor. (S/U Grading) (*) Repeatable

ENG 599 Thesis (3-0)
Prerequisite: ENG 501, ENG 502, and approval of instructor. (S/U grading) (*) Repeatable (6)

## ENGLISH AS A SECOND LANGUAGE (ESL)

ESL 075 Intermediate Reading/Writing 0(10-0)
Develop critical thinking skills. Improve reading speed and comprehension. Learn skills necessary for academic writing: development of paragraphs and compositions using description, narrative, and chronology. Prerequisite: acceptance to ELI. (S/U grading) (F,S,SS)

ESL 076 Intermediate Listening/Speaking 0(10-0)
Understand spoken English in common settings. Practice speaking appropriately in academic and social situations. Use multimedia to develop communicative competence. Prerequisite: acceptance to ELI. (S/U grading) (F,S,SS)

ESL 085 High-Intermediate Reading/Writing 0(10-0)
Read authentic and ESL materials with increasing critical ability and speed. Write more intelligibly and decrease grammatical errors. Understand several types of essay organization. Prerequisite: acceptance to ELI. (S/U grading) (F,S,SS)
ESL 086 Hi -Intermediate Listening/Speaking 0(10-0)
Understand spoken English at near normal speed. Improve fluency. Interact more confidently with other students in presentations. Use multimedia to increase communicative competence. Prerequisite: acceptance to ELI. (S/U grading) (F,S,SS)

ESL 091 Special Topics 0(3-0)
Selected topics in ESL. (S/U grading) (*) Repeatable
ESL 095 Advanced Reading/Writing 0(10-0)
Read authentic materials with near-native critical ability and speed. Write intelligibly with few grammatical and idiomatic errors. Understand thoroughly essay organization and development. Prerequisite: acceptance to ELI. (S/U grading) (F,S,SS)

ESL 096 Advanced Listening/Speaking 0(10-0)
Understand English at natural speed in social, academic, and professional situations. Speak confidently through interaction with native speakers and presentations. Multimedia experience enhances communicative competence. Prerequisite: acceptance to ELI. (S/U grading) (F,S,SS)

## EXERCISE SCIENCE AND HEALTH PROMOTION (EXHP)

## UNDERGRADUATE COURSES

EXHP 101 Introduction to EXHPR 2(2-0)
Introduction to fundamentals of exercise science, health promotion and recreation professions. Overview of health promotion, fitness, athletic training, recreation and schoolbased programs, and career opportunities. A prerequisite for EXHP 344. (F,S)

## EXHP 103L Triathlon 1(0-2)

This course is designed to prepare individuals to successfully complete a sprint distance ( 500 meter swim, 20 K bicycle and 5 K run or the equivalent) triathlon. (*)

## EXHP 104L Personal Fitness 1(0-2)

Students will learn how to evaluate their personal fitness level and develop a comprehensive exercise program beneficial to their overall health and wellness. (*)

EXHP 105L Snow Sports 1(0-2)
Beginning fundamental snowboarding and skiing. Students choose level $1-3$ skiing and/or boarding lesson at Colorado ski resort. Emphasis on safety, equipment, clothing and trip planning. (S)

EXHP 106L Martial Arts and Self-Defense 1(0-2)
Overview of the history, philosophy and techniques of martial arts and self-defense. Includes skill development of physical techniques. (O)

EXHP 108L Yoga 1(0-2)
This course will focus on key concepts in basic yoga resulting in development of valuable life skills related to creating healthy lifestyles. (*)

EXHP 109L Volleyball 1(0-2)
An introduction to the fundamental skills, rules and strategies used in power volleyball. (*)

EXHP 110L Weight Training 1(0-2)
An introduction to basic strength evaluation, fundamental machine and free weight techniques and safety concepts in the weight room. $(\mathrm{F}, \mathrm{S})$

EXHP 111 Commitment to Academic Excellence 1(1-0)
Supports the academic progress of the Student-Athlete toward intellectual development and adjustment to college life academically, athletically and socially. Various resources will be presented. ( $\mathrm{F}, \mathrm{S}$ )

EXHP 118L Jogging 1(0-2)
An introduction to walking/jogging/running techniques, training programs, fitness assessment, appropriate footwear and safety considerations. (*)

EXHP 119L Walking for Fitness 1(0-2)
The introduction and development of skills, safety, understanding of body functions and basic conditioning related to aerobic fitness through walking. (*)

EXHP 120L Aerobics 1(0-2)
Introduction and participation in the techniques used in rhythmic aerobic dance. Students are able to select from a variety of formats including but not limited to floor aerobics, step aerobics and aqua-aerobics. (*)

EXHP 121L Aerobics Instructor Training 1(0-2)
Study in leading a safe and effective aerobic exercise activity including working with diverse groups. Students receive background to sit for a national certification exam. (*)

## EXHP 122L Military Physical Training 1(0-2)

Introduction to physical fitness and training. Students participate in practical training and learn the basics of fitness, nutrition and flexibility. (F,S)

EXHP 123L Zumba 1(0-2)
ZUMBA $^{\circledR}$ is a non-competitive fitness dance program which teaches students to perform steps such as the salsa, meringue, cha-cha, samba, tango, reggaeton, and calypso. ( $F, S$ )

EXHP 124L Tai Chi 1(0-2)
Complete form of Tai Chi postures based on Yang/Sun Style will be practiced. Mandarin terminology, health philosophy and Taijiquan will be defined and discussed. (*)

EXHP 143L Folk, Square, and Ballroom Dance 1(0-2)
Overview of the music and dance techniques used in Folk, Square and Ballroom dancing. (*)

EXHP 146L Beginning Swimming 1(0-2)
Introduces the knowledge and skill necessary to handle the body with ease in the water and covers basic mechanical, physiological, and psychological concepts. (*)

EXHP 162 Personal Health 3(3-0)
The development of knowledge and the scientific basis for the analysis, evaluation and promotion of personal health and wellness. (F,S)

EXHP 162L Personal Health Lab 1(0-2)
Optional experiential lab studies to augment EXHP 162. Corequisite: EXHP 162. (F,S,SS)

EXHP 174L Tennis 1(0-2)
An introduction to the fundamental skills, rules and strategies used in the game of tennis. (*)

EXHP 175L Racquetball 1(0-2)
An introduction to the fundamental skills, rules and strategies used in the game of racquetball. (*)

EXHP 176L Life Guard Training 2(1-2)
American Red Cross Lifeguard certification course that prepares successful candidates to be certified in Lifeguarding, First Aid, and CPR. Prerequisite: swimming pre-test. (*)

EXHP 187L Intercollegiate Sports I 2(0-4)
Participation in an intercollegiate sports program. Course registration is limited to freshman competing in a varsity sport program offered by CSU-Pueblo.

EXHP 201 Drugs and Healthy Lifestyles 3(3-0)
An overview of the impact of drug abuse in today's society along with prevention information and treatment programs available. (F)

EXHP 205L Snow Sports II 1(0-2)
For students with experience in snow sports including skiing and/or snowboarding. Emphasis on safety and techniques of telemark skiing, cross-country skiing, and snowshoeing. Prerequisite: ski/snowboard experience. (S)

EXHP 208L Yoga II 1(0-2)
For students with prior experience in yoga. Emphasis on creating balance in both strength and flexibility through the performance of a variety of postures. Prerequisite: EXHP 108L or prior yoga experience. (F,S)

EXHP 211 Commitment to Service 1(1-0)
Life skills for Sophomore Student-Athletes to enhance their experience by engaging the student in service to his or her campus and surrounding communities. ( $\mathrm{F}, \mathrm{S}$ )

EXHP 222 Behavior Facilitation 3(3-0)
Study the influence of social and behavioral systems on health. Emphasis on the fundamentals of self-directed behavior change, health dysfunctions, and stress management. (F,S)

EXHP 233 History and Principles of Physical Education and Recreation 2(2-0)
Study of the history, philosophy and perspectives of physical education and recreation, and their influence upon contemporary American society. (F)

EXHP 243 Methods of Rhythmic Activities 2(2-0)
Fundamentals of folk, square and social dance; emphasis on the teaching techniques involved in basic dance styles and rhythms. (S)

EXHP 245 Motor Learning and Development 3(3-0)
Applied analysis of motor learning and motor development principles and theories throughout the human life span. (S)

EXHP 246L Methods of Swimming 1(.5-1.5)
Instruction in methods of teaching techniques, stroke analysis, class organization, pool safety, and pool maintenance. Practice teaching assignments with practical and written final exams. Prerequisite: beginning swimming skill. (F)

EXHP 276L Water Safety Instructor Certification 2(1-2)
Water safety instruction certification may be earned in this course. Prerequisite: EXHP 176L or equivalent swimming experience. (*)

EXHP 287L Intercollegiate Sports II 2(0-4)
Participation in an intercollegiate sports program. Course registration is limited to sophomore student-athletes competing in a varsity sport program offered at CSU-Pueblo.

EXHP 288 Health Promotion Practicum 3(1-4)
Overview of the fundamentals, skills, and professional opportunities in health promotion through the utilization of academic researching, application, theory, and experiential methods. (F)

EXHP 291 Special Topics (1-5 VAR) (F,S) Repeatable
EXHP 301 Dartfish Training 1(1-0)
In-depth instruction on the Dartfish software including developing video books, movement analysis, tagging, the use of hardware, and using Dartfish in coaching. (F,S)

EXHP 310L Adv Methods Strength \& Conditioning 1(0-2) Lecture and training integrating science and application of strength and conditioning methods. Emphasis on learning to perform and teach advanced strength, power, and flexibility techniques. Prerequisite: EXHP 110L or instructor permission. (S)

EXHP 336 Community Health 3(2-2)
Introduction to aspects of community and public health, functions of health services at all levels, and exploration of current health problems. Prerequisite: EXHP 101 and EXHP 288. (F)

EXHP 343 Measurement and Evaluation 3(3-0)
Introduction to the use of measurement and research. Emphasis on reviewing and interpreting professional literature, interpreting basic statistics and understanding the concepts underlying successful evaluation. Prerequisite: MATH 121 or permission of instructor. $(F, S)$
EXHP 344 Exercise Physiology 3(3-0)
Physiologic control of the human body during acute exercise, and adaptations to regular exercise stress. Emphasis on relationships among health, fitness, and exercise. Prerequisite: BIOL 223, 223L, MATH 121, EXHP 343. (F,S)

EXHP 344L Exercise Physiology Lab 1(0-2)
Extension of course lecture which provides practical experience in laboratory experiments which address exercise and exercise theory. Corequisite: EXHP 344. Prerequisite: BIOL 223, 223L, MATH 121, EXHP 343. (F,S)

## EXHP 345 Methods of Physical Activities \& Games I

 2(2-0)Teaching procedures, skills and techniques of physical activities and games (e.g. adventure education, soccer, basketball, team handball and lacrosse). (F)

EXHP 346 Methods Physical Activities \& Games II 2(2-0) Teaching procedures, skills and techniques of physical activities (e.g. volleyball, football, hockey, track/field and softball). (S)

EXHP 347 Methods of Fitness Instruction 1(1-0)
Emphasis on teaching procedures for lifetime fitness activity (e.g. weight training, aerobics, plyometrics, exercise balls, jump rope, HR monitors, cardio kickboxing, and pedometers). Prerequisite: EXHPR PE K-12 emphasis only. (S)

EXHP 348 Methods of Individual and Dual Sports 3(3-0) Basic skills and techniques of tennis, racquetball, badminton and golf; emphasis on teaching procedures in these activities. (F)

EXHP 351 Methods of Teaching Elem Physical ED 3(3-0) Study of effective teaching for elementary children including; maximizing student learning, student and self-assessment, utilization of resources, planning, implementation and revision. 30 hours field experience. Prerequisite: acceptance into Teacher Education Program. Corequisite: EXHP 478. (F)

EXHP 362 Evaluation of Current Health Issues 2(2-0)
Evaluation of current health topics such as human sexuality, violence, environmental and psychoneuroimmunology and their impact on the health of the individual and community. (S)

EXHP 364 Kinesiology 3(3-0)
Integration of fundamentals of anatomical and structural components of human movement with the study of fundamental body movements and the primary muscles involved in those movements. Prerequisite: BIOL 223, 223 L. (F,S)

EXHP 382 Lifestyle Disease Risk Reduction 3(3-0)
Overview of principles of epidemiology and lifestyle-disease pathophysiology; examination of use of epidemiologic research to identify risk factors for disease. Prerequisite: BIOL 223, 223L. (S)

## EXHP 400 Workshop (1-5 VAR)

Learning experience in physical education offered in large blocks of time not corresponding to the weekly meeting times of the regular course offerings. Prerequisite: approval of program chair. (*) Repeatable

EXHP 432 Applied Sport \& Exercise Psychology 3(3-0)
The course is designed to acquaint the student with the direct application of psychological theories and techniques for the enhancement of both sport and exercise. Prerequisite: EXHP 343. PSYCH 205 is strongly recommended. (F)

EXHP 436 Exercise Assessment 3(3-0)
Methods used to assess exercise clients and prescribe effective exercise programs in order to achieve optimal health. Referral for at risk clients will be discussed. Prerequisite: EXHP 344, 344L. (F,S)

EXHP 461 Managing Programs in EXHPR 3(3-0)
Organizational and administrative functions used in a modern management approach to programs in Physical Education, Health Promotion, Athletics, Fitness, and Recreation. Corequisite: Senior standing. (S)
EXHP 464 Adapted Physical Education 3(3-0)
Programs for diverse populations in physical education; emphasis on environments, diseases and injuries which cause individuals to require special attention. Prerequisite: non teacher education minors only, BIOL 223, 223L. (S,O)

EXHP 465 Adapted Physical Education 3(3-0)
Programs for diverse populations in physical education; emphasis on environments, diseases and injuries which cause individuals to require special attention. Prerequisite: admission to Teacher Education Program, BIOL 223, 223L. (S, O)

## EXHP 470 Methods of Coaching 3(3-0)

Study of the science and art of coaching. Understanding of the physical, mental, and emotional demands of coaching. Required course for coaching certification in Colorado. (F)

EXHP 471 Coaching and Officiating Football 2(2-0)
Techniques and strategy of coaching and officiating football. (*)
EXHP 472 Coaching and Officiating Basketball 2(2-0)
Techniques and strategy of coaching and officiating basketball. (*)

EXHP 475 Coaching and Officiating Volleyball 2(2-0)
Techniques and strategy of coaching and officiating volleyball. (*)

EXHP 478 Methods of Teaching Secondary Physical Education 3(2-2)
Study of effective teaching with emphasis on teaching methods, student learning time, classroom management and program planning. 30 hours field experience. Prerequisite: admission to Teacher Education Program. Corequisite: EXHP 351 (F)

EXHP 482 Coaching and Officiating Wrestling 2(2-0)
Techniques and strategy of coaching and officiating wrestling. (*)

EXHP 483 Coaching and Officiating Baseball 2(2-0)
Techniques and strategy of coaching and officiating baseball. (*)
EXHP 484 Coaching and Officiating Soccer 2(2-0)
Techniques and strategies of coaching and officiating soccer. (*)

EXHP 485 Methods in Health Promotion 3(2-2)
Planning, implementation, and evaluation of educational strategies and components of health promotion. Focus on educational methodology and student learning. Prerequisite: EXHP 382 or permission of instructor. (F)

## EXHP 487 Health Promotion Program Planning/Evaluation

 4(3-2)Focus on planning, implementing, and evaluating work site health promotion programs. Prerequisite: EXHP 485. (S)

EXHP 491 Special Topics (1-5 VAR)
Permission of instructor. (*) Repeatable

## EXHP 492 Research (1-6 VAR)

Research project conducted in collaboration with a faculty member. Prerequisite: approval of a faculty member. (F,S,SS) Repeatable (6)

EXHP 494 Field Experience (1-6 VAR)
Learning experience to be conducted in the professional work environment and supervised by faculty. (S/U grading) Prerequisite: approval of the department chair. (*) Repeatable (9)

EXHP 495 Independent Study (1-5 VAR)
Prerequisite: approval of the department chair. (*) Repeatable

## EXHP 498 Internship 12(0-36)

450 hours of supervised experience with approved professionals in select health promotion settings including the completion of a major application project and other various assignments. Prerequisite: senior standing, completion of all other degree requirements, 2.50 GPA in the major and department chair approval. (*)

## GRADUATE COURSES

EXHP 500 Workshop (1-5 VAR)
Graduate learning experience in physical education offered in large blocks of time not corresponding to the weekly meeting times of the regular course offerings. Prerequisite: approval of program chair. (*)

## EXHP 522 Methods of Elementary Physical Education

 3(3-0)Advanced study of effective teaching for elementary children including; maximizing student learning, student and selfassessment, utilization of resources, planning, implementation and revision. Prerequisite: graduate standing or permission from instructor. (*)

EXHP 529 Curriculum in Physical Education 2(2-0)
The advanced study of physical education curriculum models, planning, and evaluation. Prerequisite: graduate standing or permission from instructor. (SS)

EXHP 532 Applied Sport \& Exercise Psychology 3(3-0)
The course will explore advanced application of psychological theories and techniques for the enhancement of both sport and exercise. (*)

## EXHP 536 Community Health 3(2-2)

Advanced study of the aspects of community and public health, functions of health services, and application of community health theory. Prerequisite: graduate status. (F)

EXHP 549 Facilitation of Adventure Education 3(3-0)
Planning and implementing adventure activities that provide challenge, choice, and opportunities for personal and group growth. Emphasis on program development, facilitation techniques. Prerequisite: graduate status or permission from instructor. (SS*)

EXHP 562 Contemporary Issues in HPE 3(3-0)
Advanced study of current health topics affecting schools including human sexuality, violence, modification of disease risks, and drug use/abuse. Emphasis on teaching decision making. Prerequisite: graduate standing or permission from instructor. (*)

EXHP 565 Adapted Physical Education 3(3-0)
Advanced study of programs for diverse populations in physical education; emphasis on environments, diseases and injuries which cause individuals to require special attention. Prerequisite: graduate standing or permission of instructor. $(\mathrm{S}, \mathrm{O})$

## EXHP 570 Methods of Coaching 3(3-0)

Advanced study of the science of coaching. Understanding of the physical, mental, and emotional demands of coaching. Required course for coaching certification in Colorado. Prerequisite: Graduate status. (F)
EXHP 578 Methods of Secondary School PE 3(3-0)
Advanced study of effective teaching in secondary schools with emphasis on teaching methods, student learning, classroom management and program planning. Prerequisite: graduate standing or permission of instructor. (F)

EXHP 585 Methods in Health Promotion 3(2-2)
Advanced planning and implementation skills for a variety of educational methods, strategies and components of health promotion. Focus on educational methods and student learning. Prerequisite: graduate standing or permission of instructor. (F)

## EXHP 591 Special Topics (1-5 VAR)

Graduate level study or activity designed to increase understanding in areas not covered by regular offerings of the department. Prerequisite: approval of program chair. (*)

## EXHP 592 Research (1-6 VAR)

Graduate level research project conducted in collaboration with a faculty member. Prerequisite: approval of a faculty member. (F,S,SS) Repeatable (6)

EXHP 594 Field Experience (1-6 VAR)
Graduate level field experience project completed in coordination with a faculty member. Prerequisite: faculty permission. (F,S,SS) Repeatable (6)

EXHP 595 Independent Study (1-6 VAR)
Graduate level independent study completed in coordination with a faculty member. Prerequisite: faculty permission. (F,S,SS) Repeatable

## FINANCE (FIN)

## UNDERGRADUATE COURSES

FIN 330 Principles of Finance 3(3-0)
Principles of finance involved in problems confronting business organizations. Prerequisite: ACCTG 202, ECON 201, ECON 202, BUSAD 265 or MATH 156, and junior standing. (F,S)

FIN 331 Managerial Finance: Policy, Planning and Control 3(3-0)
Financial management, planning, policy formulation and financial decision making. Prerequisite: FIN 330. (*)

FIN 333 Investment Analysis 3(3-0)
Analysis and forecasting of security markets, industry and company studies, portfolio selection and management. Prerequisite FIN 330. (*)

## FIN 335 Real Estate Finance 3(3-0)

Principles of real estate financing with emphasis on residential markets, economics, governmental and location factors, financing, and real estate transactions. Prerequisite: FIN 330. (*)

FIN 430 Financial Institutions and Markets 3(3-0)
The role of financial institutions, instruments and markets; structure of interest rates; the Federal Reserve and monetary policy; and the structure, regulation, portfolio and risk management of financial institutions. Prerequisite: FIN 330. (*)

FIN 431 Financial Policy Analysis 3(3-0)
Analysis of financial policies in various organizations. Emphasis on managerial problems in long-range planning, decision making under uncertainty, risk measurement and applications of capital markets. Prerequisite: FIN 330. (*)

FIN 475 International Finance 3(3-0)
Illustrate theories and the current issues of international finance. Topics include the determination of exchange rates, intervention and international monetary systems. Prerequisite: ECON 301 and FIN 330. (*)

FIN 490 Special Projects (1-6 VAR) (*) Repeatable (6)
FIN 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable (6)
FIN 495 Independent Study (1-3 VAR)
Prerequisite: senior standing in School of Business and permission of the department chair. (*) Repeatable (6)

FIN 498 Internship (1-6 VAR)
Supervised field work in selected business, social and governmental organizations; supplemented by written reports. Prerequisite: junior or senior standing in School of Business and permission of internship coordinator. (S/U grading) (*) Repeatable (6)

## GRADUATE COURSES

FIN 501 Fundamentals of Finance 1.5(1.5-0)
This class prepares students in basic concepts of managerial finance, including goals, financial analysis, cash flows, time value, risk/return, stocks/bonds, and investment decisions. Prerequisite: admission to MBA. (*)

## FIN 505 Principles of Finance 3(3-0)

Principles of finance involved in problems confronting business organizations. Prerequisite: ACCTG 505 or equivalent, ECON 505 or equivalent. (*)

## FIN 530 Financial Management 3(3-0)

Theory and application of investment, financing and dividend decisions to maximize stockholder wealth. Use of analytical cases to solve financial problems facing business firms. Prerequisite: admission to MBA or permission of MBA Director. (*)

FIN 575 International Financial Management 3(3-0)
Financial theory and practice as applied to the financial management of multinational corporations. Prerequisite: FIN 530 and admission to MBA or permission of MBA Director. (*)

FIN 591 Special Topics 3(3-0)
Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

FIN 595 Independent Study (1-3 VAR)
Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

## FOREIGN LANGUAGE (FL)

## UNDERGRADUATE COURSES

FL 100 Introduction to Comparative Linguistics 3(3-0)
Basic concepts in linguistics; comparison of languages. (*)
FL 101 Introduction to a Critical Foreign Language I 3(3-0) Study of a foreign language not offered regularly. Different languages are offered when enrollment permits. (*) Repeatable

FL 102 Introduction to a Critical Foreign Language II 3(3-0) Prerequisite: FL 101, or permission of instructor. (*) Repeatable

FL 110 Foreign Language for Travel 1(1-0)
Fundamental vocabulary for basic tourist communication. (*)
FL 291 Special Topics (1-3 VAR) (F,S) Repeatable
FL 294 Field Experience (1-7 VAR)
Communication, lectures by writers, artists, political leaders and specialists. Visits to museums, attendance at movies, theaters and excursions. Service learning. Prerequisite: permission of instructor. (*) Repeatable

FL 394 Field Experience (1-7 VAR)
Communication, lectures by writers, artists, political leaders and specialists. Visits to museums, attendance at movies, theaters and excursions. Service learning. Prerequisite: permission of instructor. (*) Repeatable

FL 494 Field Experience (1-7 VAR)
Communication, lectures by writers, artists, political leaders and specialists. Visits to museums, attendance at movies, theaters and excursions. Service learning. Prerequisite: permission of instructor. (*) Repeatable

## FL 495 Independent Study (1-3 VAR)

Specific themes which address particular problems of literature or civilization. May be repeated for credit with approval of major adviser. Prerequisite: two years of college study of the language used for project. (*) Repeatable

## GRADUATE COURSES

FL 591 Special Topics (1-3 VAR)
Prerequisite: graduate standing and permission of instructor. (*) Repeatable

## FL 594 Field Experience (1-9 VAR)

Service learning, internships, communication, lectures by writers, artists, political leaders and specialists. Visits to museums, attendance at movies, theaters and excursions. Prerequisite: graduate standing and permission of instructor. (*) Repeatable (9)
FL 595 Independent Study (1-3 VAR)
Prerequisite: graduate standing and permission of instructor. (*) Repeatable (9)

## FRENCH (FRN)

## UNDERGRADUATE COURSES

FRN 101 Beginning French I 3(3-0)
Development of skills in speaking, listening, reading, writing, and cultural understanding. ( $F, S$ )

## FRN 102 Beginning French II 3(3-0)

Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: FRN 101 or equivalent. (F,S)

FRN 201 Intermediate French I 3(3-0)
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: FRN 102 or equivalent. (F)

FRN 202 Intermediate French II 3(3-0)
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: FRN 201 or equivalent. (S)
FRN 287 Intensive French Study Abroad (1-9 VAR)
Study of French in an immersion setting abroad, preparing the student for fluency through the study of grammar, civilization and culture, at an approved institution. Prerequisite: FRN 102 and permission of instructor. (*) Repeatable (9)

FRN 301 Advanced French Grammar 3(3-0)
A concentrated study of French grammar in addition to practice in writing, reading, speaking, and listening. Prerequisite: FRN 202 or equivalent. (*)

FRN 303 Conv and Comp: French 3(3-0)
Focus on improving linguistic proficiency within the context of French culture. Prerequisite: FRN 202 or equivalent. (*)

FRN 311 Advanced French Conversation I 3(3-0)
Emphasis on acquisition of vocabulary and idiomatic expressions. Advanced oral practice. Required for teacher certification. Prerequisite: FRN 202, or permission of instructor. (*)

FRN 312 Advanced French Conversation II 3(3-0)
Alternate for teacher certification. Prerequisite: FRN 202, or permission of instructor. (*)

FRN 341 Masterpieces of French Literature 3(3-0)
Close study of outstanding French works with emphasis on literary forms, critical methods and techniques. Required for teacher certification. Prerequisite: FRN 202, or permission of instructor. (*)

FRN 351 French Phonetics and Diction 3(2-2)
French pronunciation: theory, correction and practice of diction and intonation. Phonetic transcription and remedial exercises. Required for teacher certification. Prerequisite: FRN 202, or permission of instructor. (*)

FRN 381 French Civilization I 3(3-0)
Geography, art, architecture, economics and social problems, correlated with history from the origins to contemporary France. Required for teacher certification. Prerequisite: FRN 202, or permission of instructor. (*)

FRN 382 French Civilization II 3(3-0)
Alternate for teacher certification. Prerequisite: FRN 202, or permission of instructor. (*)
FRN 387 Intensive French Study Abroad (1-12 VAR)
Study of French in an immersion setting abroad preparing the student to become fluent in the language through the study of grammar, civilization and culture. Prerequisite: permission of instruction; FRN 201. (*) Repeatable
FRN 391 Special Topics 3(3-0)
Prerequisite: FRN 202. (*) Repeatable (9)
FRN 494 Field Experience (1-7 VAR)
Communication, lectures by writers, artists, political leaders and specialists. Visits to museums, attendance at movies, theaters and excursions. Service learning. Prerequisite: two years college French. (*) Repeatable

FRN 495 Independent Study (1-3 VAR)
Specific themes which address particular problems of literature or civilization. May be repeated for credit with approval of major adviser. (*) Repeatable

## GEOGRAPHY (GEOG)

## UNDERGRADUATE COURSES

GEOG 101 Physical Geography 3(3-0)
Three Earth spheres: the hydrosphere (oceanography, hydrologic cycle); the atmosphere (meteorology and climatology) and the lithosphere (geology, internal/external processes) are emphasized and examined. ( $F, S, S S$ )

GEOG 102 Cultural Geography 3(3-0)
Emphasis on cultural regions, cultural diffusion, and cultural landscape. Major themes are culture, population, agriculture, language and religion, ethnicity, urbanization, industry, and political geography. (F/S/SS)

GEOG 103 World Regional Geography 3(3-0)
The interconnectivity and interrelationship of the world regions by stressing physical, economic development, agricultural, cultural and population characteristics. Strengthening of one's mental world map. (F,S)
GEOG 491 Special Topics 3(3-0)
Devoted to special topics in Geography (human, physical, and regional). Prerequisite: Jr. or Sr. standing with adequate preparation and permission of instructor. (F,S,SS) Repeatable

## GEOLOGY (GEOL)

## UNDERGRADUATE COURSES

GEOL 101 Earth Science 3(3-0)
Four earth spheres: the hydrosphere (oceanography, hydrologic cycle); the atmosphere (meteorology and climatology); the lithosphere (geology; internal and external processes); and space are emphasized. Co-requisite: GEOL 101L. (F,S)

GEOL 101L Earth Science Lab 1(0-2)
Lab to accompany GEOL 101 lecture. Corequisite: GEOL 101. (F,S)

GEOL 114 Oceanography 3(3-0)
Study of world oceans and their role in the Earth system, including chemical, physical, geological, meteorological and biological aspects of the sea. Corequisite: GEOL 114L. (S)

GEOL 114L Oceanography Lab 1(0-2)
Lab to accompany GEOL 114 lecture. Corequisite: GEOL 114. (S)

## GERMAN (GER)

## UNDERGRADUATE COURSES

GER 101 Beginning German I 3(3-0)
Development of skills in speaking, listening, reading, writing, and cultural understanding. ( $F, S$ )

## GER 102 Beginning German II 3(3-0)

Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: GER 101 or equivalent. (F,S)

GER 201 Intermediate German I 3(3-0)
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: GER 102 or equivalent. (F)

GER 202 Intermediate German II 3(3-0)
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: GER 201 or equivalent. (S)
GER 301 Advanced German Grammar 3(3-0)
A concentrated study of German grammar in addition to practice in writing, reading, speaking, and listening. Prerequisite: GER 202 or equivalent. (*)

GER 303 Conv and Comp: German 3(3-0)
Focus on improving linguistic proficiency within the context of German culture. Prerequisite: GER 202 or equivalent. (*)
GER 381 German Civilization I 3(3-0)
German geography, culture and history from the beginning to the present. Prerequisite: GER 202 or permission of instructor. (*)
GER 382 German Civilization II 3(3-0)
Prerequisite: GER 202 or permission of instructor. (*)

## HISTORY (HIST)

## UNDERGRADUATE COURSES

HIST 101 World Civilization to 1100 3(3-0)
Cultural and political growth of civilizations from prehistoric times to 1100; emphasis on the unique contributions of independent cultures to world history. (F,S)

## HIST 102 World Civilization From 1100 to 1800 3(3-0)

Cultural and political interaction of civilizations from 1100 to 1800; emphasis on common problems and goals of mankind. ( $\mathrm{F}, \mathrm{S}$ )

HIST 103 World Civilization Since 1800 3(3-0)
Cultural and political interaction of civilization since 1800; emphasis on conflict and resolution. (F,S)

HIST 136 (CS 136) The Southwest United States 3(3-0) This course traces the culture and historical development of the southwestern United States, including cultural contributions of the American Indian and Hispanic peoples. ( $\mathrm{F}, \mathrm{S}$ )

HIST 201 U.S. History I 3(3-0)
United States history from founding of North American colonies to 1877 Reconstruction era. (F,S)

HIST 202 U.S. History II 3(3-0)
United States from 1877 Reconstruction era to contemporary era. ( $\mathrm{F}, \mathrm{S}$ )

HIST 291 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. ( ${ }^{*}$ )
HIST 295 Independent Study (1-3 VAR)
An individualized program of study designed by ranked, fulltime History professor for a promising student. Prerequisite: Permission of Instructor. (*)

HIST 300 Historiography 3(3-0)
Enhances student knowledge of historical profession through developing historical research skills. (F,S)

HIST 301 America to 1787 3(3-0)
History of America during the colonial and Revolutionary eras. (*)
HIST 302 America, 1787-1877 3(3-0)
History of the United States during the early national and Civil War eras. (*)

HIST 303 America, 1877-1945 3(3-0)
History of United States from the Gilded Age to 1945. (*)
HIST 304 America, 1945-Present 3(3-0)
History of the United States from 1945 to the present. (*)
HIST 311 History of United States Foreign Policy 3(3-0)
United States foreign policy from the founding of the republic to the present. (*)
HIST 312 Colorado History 3(3-0)
History, government and economic factors important to the settlement and development of Colorado. (S)

HIST 332 History of Rome from Republic to Empire 3(3-0) Course will examine the history of Rome, discussing the political, social, military, and cultural importance of this citystate that rises to a great power. Prerequisite: junior or senior standing or permission of instructor. (*)

HIST 346 (CS 346) History of Mexico 3(3-0)
This course surveys the major political, economic, social and cultural developments of Mexico from pre-Columbian times to the present. (*)

HIST 362 History of Russia 3(3-0)
Cultural and political development of Russian and Soviet history from 800 to the present; emphasis on impact of the Bolshevik Revolution on history. (*)

HIST 372 History of Modern China 3(3-0)
Cultural and political developments in modern China; emphasis on the interplay between Chinese tradition and western challenges. (*)

## HIST 395 Independent Study (1-3 VAR)

An individualized program of study designed by a ranked fulltime Historian for a promising student who has demonstrated ability in a regular History class. Prerequisite: Previous work in History and permission of Instructor. (*)
HIST 411 American Labor History 3(3-0)
History of Labor in the United States. Examines history of American workers, the unions they organized and considers the changing nature of work. (*)
HIST 413 American West 3(3-0)
Role of the individual and the group in the development of the frontier into the 20th century. Prerequisite: permission of instructor. (*)

## HIST 414 The American Civil War 3(3-0)

Social, cultural, and political developments that caused the sectional crisis, secession, and war. War coverage includes military strategy, politics, diplomacy, and emancipation. (*)

HIST 415 Historical Biography 3(3-0)
Introduction to biography as a form of history. Students select, study and critique the lives of great men and women. (*)
HIST 417 Hollywood and History 3(3-0)
The course examines how Hollywood has treated historical themes. What are the different factors that go into film making decisions? Prerequisite: junior or senior standing or permission of instructor. (*)

## HIST 427 (WS 427) Women \& Gender in European History

 3(3-0)Examines impact of women and ideas about gender on aspects of European history since 1500 and examines impact of historical changes on women and gender. Prerequisite: HIST 103 or permission of instructor. (*)

HIST 428 (SOC, WS 428) Women \& Work 3(3-0)
Examines historical and contemporary issues for women of various economic, social, and ethnic groups, especially in the US; examines gender ideologies about paid, unpaid work. Prerequisite: junior or senior standing or permission of instructor. (*)

HIST 446 History of Empires (500-1500) 3(3-0)
Survey of the rise of great empires of the world, including Arab, Gupta, T'ang, Sung, and Yuan empires to 1500 . ( ${ }^{*}$ )

HIST 447 History of the Decline of Empires (1500-Present) 3(3-0)
Survey of the decline of empires and the impact of European conquest in all areas of the world. WWI and WWII are included in this course. (*)
HIST 456 Medieval Europe 3(3-0)
Changes and continuities, important events, movements, and social and cultural changes of the medieval period of European history. (S,O)

## HIST 457 Early Modern Europe 3(3-0)

Important events, movements, and social changes of the early modern period of European history, including the Renaissance, Reformation, Absolutism, the Scientific Revolution, and the Enlightenment. ( $F, O$ )
HIST 458 Modern Europe 3(3-0)
Important changes and continuities in recent European history, including the effects of the Industrial Revolution, Victorian culture and society, science and technology, rivalries, and fascism. (S,E)
HIST 468 Military History 3(3-0)
Introduction to military history from 1700 to the present. Covers changes in policy, structural organization, planning, strategies, technology, and social impact. (*)

## HIST 489 (CS 489) Borderlands 3(3-0)

History of the Mexican cession to the United States from its Indian and Hispanic origins to the present. Prerequisite: CS/HIST 136 or HIST 201 or HIST 202 or HIST 211, or permission of instructor. (S,O)

## HIST 491 Special Topics (1-3 VAR)

Prerequisite: junior or senior status with adequate preparation and permission of instructor. (*) Repeatable

## HIST 493 Seminar 3(3-0)

Seminar devoted to special topics and issues in history; emphasis on research paper. Prerequisite: HIST 300 or permission of instructor. (S)

HIST 495 Independent Study (1-3 VAR)
An individualized program of study designed by a ranked fulltime Historian for a History major or minor. Prerequisite: History major or minor and permission of instructor. (*)

HIST 498 Internship (3-6 VAR)
For advanced students. Practical experience through internship with museums, libraries with historical collections, and other community organizations. Pre-requisites: junior or senior standing and departmental permission. (*) Repeatable (6)

## GRADUATE COURSES

HIST 501 Early America to 1763 3(3-0)
An examination of native peoples, Africans, and Europeans in the new world, C. 1499-1763. (*)

HIST 502 New American Nation, 1763-1830 3(3-0)
An examination of the American Revolution, writing of the Constitution, and political and economic development of the new republic. (*)

HIST 503 Civil War America, 1830-1877 3(3-0)
Examines sectionalism, slavery, Mexican American War, Civil War, and Reconstruction. (*)

HIST 504 U.S. History, 1877-1945 3(3-0)
Examines populism, labor strife, progressivism, race relations, Red Scare, WWI, Depression \& WWII. (*)
HIST 505 U.S. History, 1945-Present 3(3-0)
Examines the social, political and economic trends in American history since the end of WWII. (*)

HIST 511 Colorado History 3(3-0)
Examines the political, social, and economic factors important to the settlement and development of Colorado. (*)
HIST 513 American West 3(3-0)
Explores the settlement of the West, environmental history of the West, and development of the frontier in the 20th century. (*)

HIST 514 U.S. Southwest, Pre-1848 3(3-0)
Examines the cultural and historical development of the southwestern United States, focusing on the contributions of American Indian and Hispanic peoples in the colonial era. (*)

HIST 515 U.S. Southwest, Post-1848 3(3-0)
Examines the historical development of the southwestern United States, focusing on the contributions of American Indian and Hispanic peoples from 1848 to the present. (*)

HIST 520 Slavery and Abolitionism 3(3-0)
Examines the Atlantic Slave trade, plantation culture, and antislavery efforts in American history. (*)
HIST 521 U.S. History through Literature 3(3-0)
Examines classic texts in American history from a wide variety of periods (*)

HIST 588 Historiography and Theory 3(3-0)
This course enhances students understanding of history by examining the strengths and limitations of historical argumentation. Prerequisite: graduate standing or instructor's permission. (*)
HIST 589 Directed Study for Prelim Exams 3(3-0)
Directed study course with student's Masters advisor in anticipation of taking MA exam that semester. Prerequisite: graduate standing and instructor's permission. (IP or $\mathrm{S} / \mathrm{U}$ grading) (*) Repeatable

## HIST 591 Special Topics (1-3 VAR) (*)

HIST 593 Seminar 3(3-0)
Directed independent study of a historical topic resulting in a significant research paper. Prerequisite: HIST 501 and instructor's permission. (*) Repeatable

HIST 595 Independent Study (1-3 VAR)
An individualized program of study designed by a ranked Historian and approved by the Graduate Director. Prerequisite: permission of Graduate Director. (*) Repeatable (6)

HIST 598 Internship (3-6 VAR)
Practical experience through internship with museums, archives or related organizations. Prerequisite: HIST 502, 503 , or 504 and permission of Graduate Director. (*) Repeatable

HIST 599 Thesis Research 3(3-0)
Directed study course with student's Masters advisor in anticipation of completing a Master's Thesis that semester. Prerequisite: graduate standing and instructor's permission. (IP or S/U grading) (*) Repeatable

## HONORS (HONOR)

## UNDERGRADUATE COURSES

## HONOR 101 How Do you Know? 1(1-0)

The Role of the University and the History of Ideas." Students learn how diverse disciplines approach problems of data collection and epistemology. Prerequisite: director's permission. (F)
HONOR 102 Why Are We Here? 1(1-0)
Academic Research and the Big Questions." An examination of major research questions driving diverse disciplines and how they variously define the purpose of human existence. Prerequisite: HONOR 101. (S)
HONOR 201 Art and Science of Human Experience 2(2-0) Students are challenged to examine academic and professional approaches to evaluating human experience from the perspectives of art, humanities, social, behavioral, natural and applied sciences. Prerequisite: HONOR 102. (F,S)

HONOR 210 Honors Life Science and Technology 3(3-0) A thematic, interdisciplinary, small-group seminar dealing with the aesthetic, cultural, historical, sociological and scientific aspects of life science and technology. (S)

HONOR 220 Honors Health Issues 3(3-0)
A thematic, interdisciplinary small-group seminar dealing with the aesthetic, cultural, historical, sociological, scientific and technological aspects of health issues. (S)

## HONOR 230 Honors International \& Economic Issues

 3(3-0)A thematic, interdisciplinary, small-group seminar dealing with aesthetic, cultural, historical, sociological, scientific and technological aspects of international and economic issues. Prerequisite: three hours previous honors work. (*)

## HONOR 240 Honors Physical Science 3(3-0)

A thematic, interdisciplinary, small-group seminar dealing with the aesthetic, cultural, historical, sociological, scientific and technological aspects of physical science. (F)

## HONOR 250 Honors Literary Themes 3(3-0)

A thematic, interdisciplinary, small-group seminar dealing with the aesthetic, cultural, historical, sociological and scientific aspects of literary themes. (S)

HONOR 291 Special Topics (1-3 VAR)
(*) Repeatable (12)

## HONOR 380 Honors Service-Learning 1(0-1)

Students will work with a community-based organization to tearn by doing" in an area relevant to their major to enhance learning and build civic responsibility. Prerequisite: HONOR 202. (*) Repeatable (2)

## HONOR 481 Honors Capstone Project 3(3-0)

University Honors Program students enroll in this course to receive capstone credit. Senior seminar classes, capstone projects or other appropriate work is arranged by departments. Prerequisite: Three hours previous honors work. (*)

HONOR 490 Special Projects (1-3 VAR)
Prerequisite: three hours of previous honors work. (*) Repeatable

HONOR 491 Special Topics (1-3 VAR)
(*) Repeatable (12)

## ITALIAN (ITL)

## UNDERGRADUATE COURSES

ITL 101 Beginning Italian I 3(3-0)
Development of skills in speaking, listening, reading, writing, and cultural understanding. (F,S)

ITL 102 Beginning Italian II 3(3-0)
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: ITL 101 or equivalent. (F,S)

ITL 201 Intermediate Italian I 3(3-0)
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: ITL 102 or equivalent. (F)

ITL 202 Intermediate Italian II 3(3-0)
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: ITL 201 or equivalent. (S)

## ITL 287 Intensive Italian Study Abroad (1-9 VAR)

Study of Italian in an immersion setting abroad, preparing the student for fluency through the study of grammar, civilization and culture, at an approved institution. Prerequisite: ITL 102 and permission of instructor. (*) Repeatable (9)

ITL 301 Advanced Italian Grammar 3(3-0)
A concentrated study of Italian grammar in addition to practice in writing, reading, speaking, and listening. Prerequisite: ITL 202 or equivalent. (*)

ITL 303 Conv and Comp: Italian 3(3-0)
Focus on improving linguistic proficiency within the context of Italian culture. Prerequisite: ITL 202 or equivalent. (*)

ITL 381 Italian Civilization I 3(3-0)
Italian geography, culture and history from the Roman Empire to the present. Prerequisite: ITL 202 or permission of instructor. (F)

ITL 382 Italian Civilization II 3(3-0)
Prerequisite: ITL 202 or permission of instructor. (S)
ITL 387 Intensive Italian Study Abroad (1-12 VAR)
Study of Italian in an immersion setting abroad preparing the student to become fluent in the language through the study of grammar, civilization and culture. Prerequisite: permission of instructor; ITL 201. (*) Repeatable

ITL 391 Special Topics 3(3-0)
Prerequisite: ITL 202. (*) Repeatable (9)

## ITL 494 Field Experience (1-7 VAR)

Communication, lectures by writers, artists, political leaders and specialists. Visits to museums, attendance at movies, theaters and excursions. Service learning. Prerequisite: 2 years of college Italian. (*) Repeatable

ITL 495 Independent Study (1-3 VAR)
May be repeated for credit with approval of major adviser. (*) Repeatable

## MATHEMATICS (MATH)

## UNDERGRADUATE COURSES

MATH 091 Special Topics (1-4 VAR)
Special topics are offered to students in areas where regular course offerings are not available. Prerequisite: satisfactory placement exam score. This course does not count toward graduation. ( $\mathrm{S} / \mathrm{U}$ grading) (SS) Repeatable

MATH 098 Introductory Algebra 4(4-0)
Review of elementary algebraic operations including factoring and operations with fractions. Introduction to graphing, including graphs of lines. Solutions to linear and quadratic equations. This course does not count toward graduation. Prerequisite: satisfactory placement exam score. (S/U grading). (F,S,SS)

MATH 099 Intermediate Algebra 4(4-0)
A course designed to broaden and deepen algebraic problemsolving skills. Topics include systems of equations, exponents, radicals, complex numbers, quadratic equations, factoring polynomials, function notation and graphs (S/U grading). This course does not count toward graduation. Prerequisite: satisfactory placement exam score or MATH 098 or equivalent. ( $\mathrm{F}, \mathrm{S}, \mathrm{SS}$ )

MATH 109 Mathematical Explorations 3(3-0)
Emphasis on quantitative reasoning and problem solving. Topics chosen from logic, sets, algebra, linear programming, probability, statistics, number theory, geometry, voting theory, and graph theory. Prerequisite: satisfactory placement exam score or MATH 099 or equivalent. (F,S,SS)

## MATH 121 College Algebra 4(4-0)

Solutions of algebraic equations, graphs of rational functions, exponential and logarithmic functions, systems of equations, matrices, and determinants. Prerequisite: satisfactory placement exam score or MATH 099 or equivalent. (F,S,SS)

MATH 122 College Trigonometry 3(3-0)
Trigonometric and circular functions, identities, inverse functions, vectors, complex numbers. Prerequisite: MATH 121 or equivalent. (A grade of C or better is required for prerequisite courses.) (*)

## MATH 124 Pre-calculus Math 5(5-0)

Polynomial, rational, exponential and logarithmic functions; solution of systems of equations; trigonometric, circular and certain special functions. Prerequisite: satisfactory placement exam score or MATH 121 or equivalent. (A grade of C or better is required for prerequisite courses.) ( $\mathrm{F}, \mathrm{S}$ )

## MATH 126 Calculus and Analytic Geometry I 5(5-0)

 Introduction to limits, continuity, differentiation and integration with selected applications. Prerequisite: satisfactory placement exam score or MATH 124 or equivalent. (A grade of $C$ or better is required for prerequisite courses.) ( $F, S$ )MATH 156 Introduction to Statistics 3(3-0)
Introduction to data analysis. Binomial and normal models. Sample statistics, confidence intervals, hypothesis tests, linear regression and correlation, and chisquare tests. Prerequisite: satisfactory placement exam score or MATH 099 or equivalent. ( $F, S, S S$ )

## MATH 207 Matrix and Vector Algebra with Applications

 2(2-0)Systems of equations, matrix representation of systems, solution of systems, inverses, determinants, elgenvalues and elgenvectors. Vectors, scalar and cross-products, applications to two- and three- dimensional geometry. Prerequisite: MATH 124, but MATH 126 is strongly recommended. (A grade of C or better is required for prerequisite courses.) Corequisite: Math majors and minors should take this course concurrently with MATH 224 or MATH 325 . (F,S)

## MATH 220 Quantitative Analysis for Business 4(4-0)

An introduction to quantitative methods required for business studies, includes linear programming, probability and statistics. Prerequisite: satisfactory placement exam score or MATH 121 or equivalent. (A grade of C or better is required for prerequisite courses.) (F,S,SS)

## MATH 221 Applied Calculus: An Intuitive Approach

 4(4-0)Non-rigorous introduction to calculus with emphasis on applications and modeling in the life sciences, social and behavioral sciences and business. Prerequisite: satisfactory placement exam score or MATH 121 or equivalent. (A grade of $C$ or better is required for prerequisite courses.) ( $F, S$ )
MATH 224 Calculus and Analytic Geometry II 5(5-0)
Differentiation and integration of trigonometric, logarithmic, and other transcendental functions. Infinite sequences and series, parametric representation of curves, and selected applications. Prerequisite: MATH 126. (A grade of C or better is required for prerequisite courses.) Corequisite: Students planning on taking MATH 325 should take MATH 224 and MATH 207 concurrently. (F,S)
MATH 242 Introduction to Computation with MATLAB 4(3-2)
Introduction to mathematical computation using MATLAB. Includes projects in numerical, graphical and symbolic computation. Loops, conditionals, functions, scripts, recursion, errors, program testing and documentation. Prerequisite: MATH 126 and MATH 207 or equivalent. (A grade of C or better is required for prerequisite courses.) ( S )

MATH 291 Special Topics (1-5 VAR)
Prerequisite: permission of instructor and approval of the department chair. $(F, S)$ Repeatable
MATH 295 Independent Study (1-3 VAR)
Prerequisite: permission of instructor. (F,S) Repeatable

## MATH 307 Introduction to Linear Algebra 4(4-0)

A rigorous development of vector spaces and linear transformations. Prerequisite: MATH 207 and MATH 224 and knowledge of a programming language. (A grade of C or better is required for prerequisite courses.) ( $\mathrm{F}, \mathrm{S}$ )

MATH 319 Number Theory 3(3-0)
Divisibility, prime numbers, linear congruences, multiplicative functions, cryptology, primitive roots, and quadratic residues. Prerequisite: MATH 307 or MATH 320. (A grade of C or better is required for prerequisite courses.) (*)

MATH 320 Introductory Discrete Mathematics 3(3-0)
Introduction to discrete structures with emphasis on logic and proof. Topics selected from graph theory, boolean algebra, combinatorics, binary relations, set theory, functions and sequences. Prerequisite: a grade of C or better in MATH 224 and MATH 207. (*)

MATH 325 Intermediate Calculus 3(3-0)
Continuation of MATH 224. Vector valued functions and multivariable calculus. Prerequisite: MATH 224 or equivalent. (A grade of C or better is required for prerequisite courses.) Corequisite: Students who have not yet completed MATH 207 must enroll in MATH 325 and MATH 207 concurrently. (F)
MATH 330 Introduction to Higher Geometry 3(3-0)
Euclidean, hyperbolic, finite, and transformation geometries, models, and constructions. Prerequisite: MATH 224 or permission of instructor. (A grade of C or better is required for prerequisite courses.) (S)

MATH 337 Differential Equations I 3(3-0)
First order differential equations, homogeneous and nonhomogenous linear differential equations, introduction to the Laplace transform, applications. Prerequisite: MATH 224 or equivalent. (A grade of C or better is required for prerequisite courses.) (S)

MATH 338 Differential Equations II 3(3-0)
Linear systems, existence and uniqueness of solutions, nonlinear equations, series solutions, orthogonal sets of functions. Fourier series, boundary value problems, partial differential equations and applications. Prerequisite: MATH 337. MATH 325 is recommended. (A grade of $C$ or better is required for prerequisite courses.) (*)

## MATH 342 Introduction to Numerical Analysis 3(3-0)

Numerical solutions of polynomial, differential, integral, and other equations using the computer. Prerequisite: MATH 207 and a programming language, or permission of instructor. (A grade of $C$ or better is required for prerequisite courses.) (*)

## MATH 345 Algorithms and Data Structures 4(3-2)

An introduction to data structures, sorting, searching, recurrence relations and performance measures. Algorithms will be studied analytically and through computer implementation. Prerequisite: MATH 207 and MATH 224. (A grade of C or better is required for prerequisite courses.) (*)

MATH 350 Probability 3(3-0)
Introduction to probability theory and stochastic processes. Probability spaces, random variables and their distributions, exponential and Poisson processes, limit theorems and applications. Prerequisite: MATH 325. (A grade of C or better is required for prerequisite courses.) (F)

MATH 356 Statistics for Engineers and Scientists 3(3-0) Calculus-based introduction to statistical methods. Sampling distributions, hypothesis testing, linear regression, design of experiments using ANOVA. Data analysis with Minitab. Prerequisite: MATH 256 or MATH 350. (A grade of C or better is required for prerequisite courses.) (S)

MATH 360 Elementary Concepts of Mathematics I 3(3-0) Development of the real number system and related concepts, including sets, numeration systems, whole numbers, integers, fractions, rational numbers, number theory and algorithms. Prerequisite: Intermediate Algebra, or equivalent. Recommend MATH 156. (A grade of $C$ or better is required for prerequisite courses.) ( $F, S$ )
MATH 361 Elementary Concepts of Mathematics II 3(3-0) Conceptual development of fractions, rational numbers, geometry, measurement, probability and statistics. Prerequisite: C or better in MATH 360. Recommend MATH 156. (F,S,SS)

## MATH 362 Problem Solving for K-6 Teachers 3(3-0)

This course focuses on the process of mathematical problem solving. Students will develop and implement useful heuristics, and reflect on problem solving strategies. Prerequisite: C or better in both MATH 156 and MATH 361, or their equivalents. (F,S)

MATH 411 Introduction to Topology 3(3-0)
An introduction to topological spaces, homeomorphisms, topological properties, and separation axioms. Prerequisite: MATH 320. (A grade of C or better is required for prerequisite courses.) (*)

## MATH 421 Introduction to Analysis 4(4-0)

An introductory course in real analysis providing a rigorous development of the concepts of elementary calculus. Prerequisite: MATH 307 and 3 additional upper division mathematics courses. (A grade of C or better is required for prerequisite courses.) (F)

## MATH 425 Complex Variables 3(3-0)

An introduction to complex function theory. Complex numbers, sequences and series, the calculus of complex functions, analytic functions, and conformal mappings. Prerequisite: MATH 325. (A grade of $C$ or better is required for prerequisite courses.) (*)

MATH 427 Abstract Algebra 4(4-0)
Introduction to groups, rings, and fields and their elementary properties. Prerequisite: MATH 307 and 3 additional upper division mathematics courses. (A grade of C or better is required for prerequisite courses.) (S)

## MATH 445 Discrete Mathematics 3(3-0)

Topics selected from mathematical reasoning, combinatorial techniques, set theory, binary relations, functions and sequences, algorithm analysis, and discrete analysis. Prerequisite: MATH 224, 307 and knowledge of a programming language. (A grade of C or better is required for prerequisite courses.) (*)

MATH 463 History of Mathematics 3(3-0)
Survey of the origins of important mathematical concepts and of the mathematicians responsible for these discoveries. Prerequisite: MATH 307 or MATH 320. (A grade of C or better is required for prerequisite courses.) ( $\mathrm{F}, \mathrm{O}$ )

## MATH 477 Materials and Techniques of Teaching Secondary School Mathematics 4(4-0)

Topics and current issues in secondary mathematics education, including materials development, learning theories, instructional and assessment strategies, curriculum, planning and standards. Field experience required. Prerequisite: Acceptance into Teacher Education Program and MATH 307 or MATH 320. (A grade of C or better is required for prerequisite courses.) (F,E)

## MATH 480 Tutoring Practicum (1-2 VAR)

Participation in tutoring mathematics in the MLC under the guidance of the MLC Director. May be repeated for a maximum of two credits. Prerequisite: C or better in MATH 224 and permission of MLC Director. (A grade of C or better is required for prerequisite courses.) (S/U grading) (F,S,SS) Repeatable (2)

MATH 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (F,S) Repeatable
MATH 492 Research (1-3 VAR)
Research project selected by student and supervised by a regular mathematics faculty member. Prerequisite: department approval. (F/S) Repeatable

MATH 493 Seminar (1-3 VAR)
Prerequisite: senior standing and permission of instructor. (F,S) Repeatable

MATH 495 Independent Study (1-3 VAR)
Prerequisite: senior standing and permission of instructor. (F,S) Repeatable

MATH 498 Internship (1-6 VAR)
Work experience using the discipline of mathematics under the direction of the selected organization and a faculty member. Prerequisite: junior or senior standing and permission of the department chair. (S/U grading) (F,S,SS) Repeatable

## GRADUATE COURSES

MATH 501 Foundations of Mathematics 3(3-0)
Sets, logic, axiomatics, mappings and the various subsystems of the reals for beginning graduate students. Prerequisite: permission of instructor. (*)

## MATH 507 Linear Algebra 3(3-0)

Vector spaces, linear transformations, matrix representation, canonical form. Prerequisite: permission of instructor. ( ${ }^{*}$ )

MATH 521 Intermediate Analysis 3(3-0)
Point set theory, including the Bolzano-Weierstrass and the Heine-Borel theorems, theory of differentiation and Riemann integration, and sequences and series of functions. Prerequisite: permission of instructor. (*)

MATH 527 Abstract Algebra 3(3-0)
Groups, rings, integral domains, quotient rings, ideals, fields, homomorphisms and related topics. Prerequisite: permission of instructor. (*)

MATH 530 Advanced Geometry 3(3-0)
Foundations of geometry, geometric transformations, and applications. Prerequisite: permission of instructor. (*)

MATH 550 Statistical Methods 3(3-0)
Statistical modeling as a framework for the analysis of experimental data. Emphasis on use of statistical software. Regression, ANOVA, variance components, and chisquare tests. Prerequisite: MATH 156 or equivalent within the last five years. (A grade of C or better is required for prerequisite courses.) (S)

## MATH 556 (EN 556) Design and Analysis of Experiments

 3(3-0)Foundations of experimental design, outline efficient methods to implement experiments, develop statistical methods to sort signal from noise, analysis of variance and response surface models. Prerequisite: permission of instructor. (SS,*)

## MATH 577 Concepts in Secondary School Mathematics (1-3 VAR)

Problems of teaching secondary school mathematics; the slow learner, methods, gifted students, evaluation. Prerequisite: permission of instructor. (*)
MATH 591 Special Topics (1-3 VAR) (*) Repeatable
MATH 595 Independent Study (1-2 VAR)
(*) Repeatable
MATH 598 Graduate Internship (1-4 VAR)
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member. Prerequisite: graduate standing. (S/U grading) (F,S,SS) Repeatable

MATH 599 Thesis Research (1-6 VAR)
Prerequisite: graduate student status. (IP and SU grading) (F,S,SS) Repeatable

## MASS COMMUNICATIONS AND CENTER FOR NEW MEDIA (MCCNM)

## UNDERGRADUATE COURSES

MCCNM 101 Media and Society 3(3-0)
Survey course that examines the historical, sociological, economic, technological, and ethical foundations of mediated communication from a social scientific perspective. ( $\mathrm{F}, \mathrm{S}$ )

MCCNM 140 Radio Station Operation 1(1-0)
An introduction to radio station operation. Students gain practical experience operating KTSC 89.5, Colorado State University-Pueblo's 10,000 watt radio station. Prerequisite: MCCNM 101. (F,S)

MCCNM 201 Introduction to Journalism 3(3-0)
Instruction in basic journalism concepts including news writing style, news values, the public's right to know, objectivity, fairness and accuracy. Required for majors and minors. Prerequisite: ENG 101 and 102. ( $F, S$ )

MCCNM 210 Intro to Integrated Communication 3(3-0) Fundamental principles of Integrated Marketing Communication, including advertising, public relations, sales promotion, and direct response, as applied to non-profit, government, and for profit organizations. Prerequisite: MCCNM 101. (F,S)

MCCNM 211 Digital Publishing 3(1-4)
To develop publishing and design skills with varied software packages and within PC and Mac environments, preparing students for publication design and editing careers. (F,S,SS)

MCCNM 220 Introduction to Electronic Media 3(3-0)
The course focuses upon the history, background, and technologies of the electronic media. (F,S)

MCCNM 222 Broadcast News Writing 3(3-0)
Preparation of copy for radio/television news reports, interviews and commentary. (*)
MCCNM 232 Website Design 3(2-2)
Introduction to the creation and design of WWW pages, software applications, protocols and standards for implementing and managing WWW sites. Prerequisite: MCCNM 101. (F,S)

MCCNM 233 Script Writing 3(2-2)
Techniques, styles, formats, treatments, outlines, and scenarios for script forms used in the electronic media are covered with emphasis upon preparing scripts for production. Prerequisite: MCCNM 201. (S)

MCCNM 235 (WS 235) Women and Media 3(3-0)
The historical and cultural implications of the mass media's portrayal of women and the extent of their media participation from colonial to contemporary times. (*)

MCCNM 238 Multimedia Applications 3(2-2)
Introduction to the principles and applications of digital multimedia with special emphasis on animation, digital audio and video as well as interface design. Prerequisite: MCCNM 232. (*)

MCCNM 245 Digital Media Production 3(3-0)
Concepts, skills and technology needed for recording and production of digital audio and video communication. Prerequisite: MCCNM 101 and 220. (F,S)

MCCNM 246 Advanced Digital Media Production 3(2-2)
The theory and practice of location digital video production using the single-camera approach to news and other nonfiction formats. Prerequisite: MCCNM 245. (*)

## MCCNM 250 Media Lab (1-3 VAR)

A laboratory course for students involved in University publications and campus broadcast operations. May be repeated for up to four credits. Prerequisite: permission of instructor. (*) Repeatable (4)

MCCNM 251 Sports Writing and Statistics 3(2-3)
Study and practical application of sports writing and statistics; emphasis on press box experience at intercollegiate athletic events. Prerequisite: MCCNM 201. (*)

MCCNM 260 Digital Imaging 4(3-2)
A course in applied digital imaging for mass communications print and web publications. Emphasis is on digital image acquisition, enhancement and creative application using computer software. (SS)

MCCNM 282 Digital Media Post Production 3(2-2)
The theory and practice of digital post production using nonlinear editing. Students will use their production skills in a variety of community based projects. Prerequisite: MCCNM 101, 220, and 245. (*)

MCCNM 301 Editorial Writing 3(3-0)
Study of editorial page management and policy, with emphasis on preparation of editorials, columns and critical reviews. Prerequisite: MCCNM 201. (*)
MCCNM 302 Advertising Writing 3(3-0)
Copy writing essentials and formats for print, broadcast and direct mail advertising. Emphasis on developing writing techniques for practical application in both retail and product advertising. Prerequisite: MCCNM 210 or permission of instructor. (F)

MCCNM 304 Feature Writing 3(3-0)
Reporting on the student experience via seasonal stories, profiles, timeless stories and in-depth articles. Prerequisite: MCCNM 201. (F,S)

MCCNM 305 News Reporting 3(3-0)
Course covers the principles and practices, skills and ethics of professional beat and general assignment news reporting specifically in-depth interviewing and other news gathering techniques. Prerequisite: MCCNM 201 and 304. (*)

MCCNM 311 Copy Editing 3(3-0)
News evaluation, copy reading, rewriting, headline writing, page makeup and similar duties of the newspaper copy editor. Prerequisite: MCCNM 201 and 304. (F)

MCCNM 312 Publication Design 3(3-0)
Basic design principles, photography and art cropping, page makeup and layout, all related to graphic design in publishing. Prerequisite: MCCNM 211. (S)

MCCNM 317 Advertising Strategy 3(3-0)
Seminar emphasizing tactics and strategies of advertising planning, utilizing media techniques, marketing posture and creative media buying. Prerequisite: MCCNM 210. (*)
MCCNM 318 Regulation of Electronic Media 3(3-0)
The historical and legal structures of radio, television, cable, and new technologies of mass communications are explored with emphasis upon inventors, innovation, and social development. Prerequisite: MCCNM 101 and 220. (F,S)

MCCNM 320 Media Programming 3(3-0)
Program types used on broadcast stations; analysis of network structure and local station programs; ethical requirements in programming. Prerequisite: MCCNM 101 and 220. (F)

MCCNM 321 Public Relations Case Problems 3(3-0)
Emphasis on analyzing public relations scenarios involving non-profit, private sector and government organizations and their impact on such publics as employees, consumers, voters, and volunteers. Prerequisite: MCCNM 210. (F)

MCCNM 330 (WS 330) Gender and Film 3(3-0)
A discussion course which examines gender roles in theatrical and documentary film while considering the perspective of producers, actors and spectators and salient film theories. Prerequisite: upper division standing in MCCNM or Women's Studies. (*)

## MCCNM 332 Advanced Web Design and Development

 3(2-2)Study and implementation of advanced concepts in web design focused on a client-based curriculum that includes graphic design, usability and accessibility, design and architecture. Prerequisite: MCCNM 232 or permission of instructor. (S)

MCCNM 336 Interactive Media 3(3-0)
An overview of interactive media systems and the computer applications used to create interactive media content. Prerequisite: MCCNM 101. (F)

MCCNM 338 Global Communications 3(3-0)
A discussion of the cross border flow of information and cultural products, emphasis placed on major movements, investors, and global activities involved in international communication. Prerequisite: MCCNM 220. (F,S)

MCCNM 350 Advanced Media Lab (2-3 VAR)
Advanced laboratory courses for media that include the TODAY online and print news operation, advertising, KTSCFM radio, and KTSC-RMPBS television production. Prerequisite: MCCNM major or minor, junior or senior standing, or permission of instructor. (F,S,SS) Repeatable (9)

MCCNM 370 Non-Profit Organizations and Communication 3(3-0)
A seminar course using cooperative teaching that integrates theory and practice to examine the basic elements of nonprofit organizations from economic, political, and social perspectives. Prerequisite: sophomore standing. (SS)

MCCNM 402 Photojournalism 4(3-2)
Practical course in pictorial reporting; emphasis on spot news feature, picture stories and photographic essays. Prerequisite: MCCNM 260 or permission of instructor. (*)

MCCNM 411 Media Law and Ethics 3(3-0)
Ethical and legal factors of mass communications related to the structure and substance of laws at federal, state and local levels, including freedoms, restraints and contemporary issues. Prerequisite: junior or senior standing. (F,S)

MCCNM 415 Theories of Mass Communications 3(3-0)
Application of information theories to mass communication problems. Nature of the communication process in groups and between mass media and audiences. Contribution of theoretical concepts to solving specific problems. Prerequisite: senior standing or permission of instructor. (*)
MCCNM 422 Writing for Public Relations 3(3-0)
A specialized course in persuasive writing techniques in different formats. Emphasis is on print and electronic news releases, public service announcements, brochures, newsletters, speeches, and proclamations. Prerequisite: MCCNM 201 and 210. (S)

MCCNM 425 Audience Research Methodology 3(3-0)
Generalized research methodology course. Effective and appropriate research tools to define and describe various publics contained within the mass audience. Emphasis on sampling practices, encoding and interpretation of results. Pragmatic task activities via Nielson, Arbitron, SRDS, content analysis and related data sources. ( $F, S$ )

MCCNM 430 Integrated Communications Campaigns 3(3-0) The course examines the organization, structure, components and preparation of an integrated communication campaign focusing on advertising, public relations, sales promotion and direct response. Prerequisite: MCCNM 210. (F)

MCCNM 432 Video Documentary 3(2-2)
Advanced production course about non-fiction formats. The course combines theory, history, and production aesthetics specific to television documentary with opportunity to produce a TV documentary. Prerequisite: MCCNM 245 and 246. (*)

MCCNM 440 (ENG 440) Magazine Writing 3(3-0)
Instruction and practice in writing nonfiction magazine articles, with emphasis on story research and market selection. Prerequisite: MCCNM 201 and 304. (*)
MCCNM 445 Reporting Public Affairs 3(3-0)
Instruction and practice in reporting important issues in areas such as crime, courts, local and state government. Prerequisite: MCĆNM 304 and 305. (S)

MCCNM 450 Film Criticism in the Media 3(3-0)
The role and function of the film critic in television and print journalism, with emphasis on writing the critical review. Prerequisite: senior standing. (*)

## MCCNM 490 Special Projects 3(0-3)

Individualized instruction within a special interest area, under supervision of a member of the department. Repeatable once. Prerequisite: junior or senior standing, or permission of instructor. (F,S,SS) Repeatable (6)

MCCNM 491 Special Topics (1-3 VAR)
Prerequisite: junior or senior standing, or permission of instructor. (F,S) Repeatable

MCCNM 493 Seminar 3(3-0)
Seminar devoted to special problems in mass media; emphasis on interrelationships of media, understanding media, and the role of criticism. Prerequisite: senior standing. (F,S)

MCCNM 494 Field Experience (3-9 VAR)
A semester-long internship. Student performs the professional duties required by the cooperating commercial mass medium, business or public service agency. May be taken for a maximum of 9 credits. Prerequisite: junior or senior standing, minimum of 30 hours in major, or permission of program chair, 3.0 major GPA. (F,S,SS) Repeatable (9)

MCCNM 495 Independent Study 2(0-2)
Prerequisite: junior or senior standing, or permission of instructor. (F,S)

## GRADUATE COURSE

MCCNM 591 Special Topics (1-3 VAR)
Prerequisite: graduate standing. (*)

## MECHANICAL ENGINEERING (ME)

## UNDERGRADUATE COURSE

ME 250 Computer Applications in Engineering 2(2-0)
Use of digital computers in instrumentation, control, and analysis. Prerequisite: EN 105 and MATH 126. (S)

## MANAGEMENT (MGMT)

UNDERGRADUATE COURSES
MGMT 201 Principles of Management 3(3-0)
Managerial process of planning, organizing, leading, decisionmaking, and controlling. Modern management techniques will be emphasized. Prerequisite: BUSAD 101 or permission of instructor for non-business majors. (F,S,SS)

## MGMT 301 Organizational Behavior 3(3-0)

Team-work, individual and group behavior, motivation, work design, communication, decision-making, leadership, and organizational culture. Prerequisite: MGMT 201, junior standing. (F,S,SS)

MGMT 311 Operations and Quality Management 3(3-0)
Managerial perspective of the operations and quality functions, use of analytical tools to solve operations and quality problems. Prerequisite: MGMT 201, BUSAD 265 or MATH 156, and junior standing. (F,S)

MGMT 318 Human Resource Management 3(3-0)
An examination of the human resource functions of planning, selection and recruitment, compensation, training and development, employee and labor relations, and safety and health. Prerequisite: MGMT 201 and junior standing. (*)

MGMT 362 Purchasing and Materials Management 3(3-0) Strategies and tactical methods, opportunities and problems associated with the flow of materials in an organization will be covered. Prerequisite: MGMT 311 (*)

MGMT 365 Management Information Systems 3(3-0)
Introduction to application and management of IT in functional business areas (marketing, finance, accounting, etc.). Includes IT strategy, business intelligence, e-commerce, and enterprise information systems. Prerequisite: CIS 103, 104, 105, MGMT 201 and junior standing. (*)

MGMT 368 Project Management 3(3-0)
Project planning, control, management and evaluation. Use of project planning software. Prerequisite: MGMT 201 and junior standing. ( $F, S$ )

MGMT 410 Labor Management Relations 3(3-0)
Federal and state legislation and executive orders governing the employer-employee relationship; legal rights of organizations and collective bargaining. Prerequisite: MGMT 318 (*)

MGMT 414 Entrepreneurship 3(3-0)
In-depth analysis of the various environment, management, accounting, finance, and legal considerations required for business plan development by an entrepreneur or small business owner. Prerequisite: senior standing, FIN 330, MGMT 311, MKTG 340, or permission of instructor. (*)

MGMT 460 Operations Strategy 3(3-0)
Examination of recent developments in the strategy of operations in the manufacturing and service sectors involving technological policy, new process development, and new product introduction. Prerequisite: MGMT 311. (*)

MGMT 468 Quality Management 3(3-0)
Concepts and techniques of quality improvement processes. Defining quality in customer satisfaction terms and improving quality of products and service through modern techniques. Prerequisite: MGMT 311. (*)

MGMT 471 Organization Theory and Design 3(3-0)
Evaluation of organizational design structures, measurement of system performance, and problems in design of adaptive systems. Prerequisite: senior standing in HSB and permission of advisor. (*)

MGMT 475 International Management 3(3-0)
An analysis of management opportunities and challenges in the global environment and the evaluation and formulation of strategies of firms operating and expanding internationally. Prerequisite: MGMT 301 and 311. (F,S,SS)

## MGMT 485 Strategic Management 3(3-0)

Integration of the business core disciplines to explore ways that strategy is formed in contemporary business organizations. Case method used extensively. Prerequisite: senior standing in the School of Business and completion of the Business Core. BUSAD 493 may be taken concurrently. (F,S,SS)

MGMT 490 Special Projects (1-6 VAR)
(*) Repeatable (6)
MGMT 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable (6)
MGMT 495 Independent Study (1-3 VAR)
Prerequisite: senior standing in School of Business and permission of department chair. (*) Repeatable (6)

## MGMT 498 Internship (1-6 VAR)

Supervised field work in selected business, social and governmental organizations; supplemented by written reports. (S/U grading) Prerequisite: junior or senior standing in School of Business and permission of internship coordinator. (*) Repeatable (6)

## GRADUATE COURSES

MGMT 501 Fundamentals of Management 3(3-0)
This class familiarizes students with the managerial process and multiple specific topics related to the managerial function. Prerequisite: admission to MBA. (*)

MGMT 505 Principles of Management 3(3-0)
Managerial process of planning, organizing, leading, decisionmaking, and controlling. Modern management techniques will be emphasized. (*)

MGMT 511 Production/Operations Management 3(3-0) Managerial perspective of operations functions, understanding of analytical tools to solve operations problems, applied operations issues, and develop decision-making skills. Prerequisite: admission to MBA or permission of MBA Director. (*)

## MGMT 520 Management of Organizational Behavior

 3(3-0)Ideas and concepts for increasing effectiveness in organizations. Major topics include personality, motivation, leadership, communication, group dynamics, change and conflict, and contingencies of work unit design. Prerequisite: admission to MBA or permission of MBA Director. (*)

MGMT 521 Theories of Organizational Design 3(3-0)
Identification of external environments faced by organizations and theories of organizational design that enable organizations to operate more effectively within their respective environments. Prerequisite: admission to MBA or permission of MBA Director. (*)
MGMT 565 Management Information Systems 3(3-0)
Principles, methodologies, practices and management of information systems in business organizations, topics include: IT strategy, IT project management, e-commerce, and enterprise information systems. Prerequisite: admission to MBA or permission of MBA Director. (*)

MGMT 575 International Management 3(3-0)
An advanced analysis of management opportunities and challenges in the global environment and the evaluation and formulation of strategies of firms operating and expanding internationally. Prerequisite: MGMT 520 and BUSAD 502. (F,S,SS)

MGMT 585 Management Policy and Strategy 3(3-0)
Critical analysis of the policy/strategy field. This course integrates the business core disciplines to explore ways that strategy is formed in contemporary business organizations. Case Method used extensively. Prerequisite: admission to MBA or permission of MBA Director and completion of core courses. (*)

MGMT 591 Special Topics 3(3-0) (*) Repeatable (6)

## MGMT 595 Independent Study (1-3 VAR)

Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

## MARKETING (MKTG)

## UNDERGRADUATE COURSES

MKTG 340 Principles of Marketing 3(3-0)
Analytical survey of problems encountered in distributing goods and services from a marketing-management approach with emphasis on the role of the consumer and the social responsibility of the marketer. Prerequisite: junior standing. ( $\mathrm{F}, \mathrm{S}$ )
MKTG 341 Sales Force Management 3(3-0)
Managing a sales force including recruiting, selection, training, compensation, supervision, stimulation and sales planning. Computer simulation used to do forecasting, budgeting, territory allocation, sales analysis and control. Prerequisite: MKTG 340. (*)

## MKTG 342 Promotional Strategy 3(3-0)

Principles, concepts and problems involved in development and management of advertising, personal selling, public relations and sales promotion programs, activities in the global economy. Prerequisite: MKTG 340. (*)

## MKTG 345 Retail Management 3(3-0)

Issues in buying, maintaining inventory, displaying, designing store layouts, promoting, providing services and general merchandising of products for improving retail profitability. Prerequisite: MKTG 340. (*)

## MKTG 348 Consumer Behavior 3(3-0)

Survey of contributions of behavioral sciences to understanding and prediction of consumer behavior in the decision-making process. Prerequisite: MKTG 340. (*)

MKTG 440 Marketing Research 3(3-0)
Fundamental techniques. Practical experience in research methodology: planning an investigation, questionnaires, sampling, interpretation of results, report preparation. Prerequisite: MKTG 340 and BUSAD 265. (*)
MKTG 441 Marketing Strategies 3(3-0)
Detailed consideration of process of formulating and implementing strategies in marketing. Major emphasis on markets, channels of distribution, and product analysis. Prerequisite: MKTG 340, and either MKTG 440 or BUSAD 360. (*)

MKTG 475 International Marketing 3(3-0)
Effects of culture, political and legal structures on marketing. Planning for international products, services, promotion, pricing, distribution and impact of trade groups. Prerequisite: MKTG 340. (*)

MKTG 490 Special Projects (1-6 VAR)
Prerequisite: MKTG 340 and permission of instructor. (*)
Repeatable (6)

## MKTG 491 Special Topics (1-3 VAR)

Prerequisite: MKTG 340 and permission of instructor. (*) Repeatable (6)

MKTG 495 Independent Study (1-3 VAR)
Prerequisite: MKTG 340 and permission of instructor. (*) Repeatable (6)

MKTG 498 Internship (1-6 VAR)
Supervised field work in selected business, social and governmental organizations; supplemented by written reports. (S/U grading) Prerequisite: MKTG 340, junior or senior standing in School of Business, and permission of internship coordinator. (*) Repeatable (6)

## GRADUATE COURSES

MKTG 501 Fundamentals of Marketing 1.5(1.5-0)
This class prepares students in the conception, promotion, pricing and distribution of ideas, goods, and services from a marketing perspective. Prerequisite: admission to MBA. (*)

MKTG 505 Principles of Marketing 3(3-0)
Analytical survey of problems encountered in distributing goods and services from a marketing-management approach with emphasis on the role of the consumer and the social responsibility of the marketer. (*)

MKTG 540 Marketing Management 3(3-0)
Emphasizes an understanding of market behavior, coordination and implementation of the marketing mix with other managerial decisions, and the integration of theory through use of cases. Prerequisite: admission to MBA or permission of MBA Director. (*)
MKTG 575 International Marketing 3(3-0)
An advanced analysis of marketing opportunities and challenges in the global environment and the evaluation and formulation of strategies of firms operating and expanding internationally. Prerequisite: MKTG 540. (F,S,SS)

MKTG 591 Special Topics 3(3-0) (*) Repeatable (6)
MKTG 595 Independent Study (1-3 VAR)
Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (F,S,SS) Repeatable (6)

## MILITARY SCIENCE AND LEADERSHIP (MSL) UNDERGRADUATE COURSES

MSL 101 Leadership and Personal Development 1(1-0) Introduces students to the personal challenges and competencies that are critical for effective leadership. Students learn skills that relate to leadership, officership and the Army. Field work required once a week. (F)

MSL 102 Introduction to Tactical Leadership 1(1-0)
Provides an overview of leadership fundamentals such as problem solving, listening skills and writing. Students explore dimensions of leadership in the context of classroom instruction and practical exercises. Field work required once a week. (S)

MSL 201 Innovative Team Leadership 2(2-0)
Explores the dimensions of creative tactical leadership strategies and styles by examining team dynamics and leadership theories. Students practice team building exercises during leadership labs. Field work required once a week. (F)

MSL 202 Foundations of Tactical Leadership 2(2-0)
Examines the challenges of leading tactical teams in the contemporary operating environment (COE). Highlights terrain analysis, operation orders and adaptive leadership. Field work required once a week. (S)

MSL 301 Adaptive Tactical Leadership 3(3-0)
Challenges students to study, practice and evaluate adaptive leadership skills in scenarios related to squad tactical operations. Students receive specific feedback on their leadership skills. Field work required once a week and physical training required three times per week. Prerequisite: ROTC Basic Course Credit. (F)

MSL 302 Leadership in Changing Environments 3(3-0)
Employs increasing leadership challenges to build skills in leading tactical operations at the platoon level. Students learn basics of stability operations and conduct military briefings. Field work required once a week. Physical training required three times/week. Prerequisite: ROTC Basic Course Credit. (S)

MSL 303 Advanced Camp 6(0-12)
Students are assigned to a unit, placed in leadership positions, and evaluated on how they work in that unit. Mandatory for Advanced Course ROTC students. Prerequisite: MSL 301 and MSL 302. (SS)

## MSL 401 Developing Adaptive Leaders 3(2-2)

Develops proficiency in planning, executing and assessing complex operations by functioning as a staff; includes basics of risk management, ethical decision-making and military justice. Field work required once a week. Physical training required three times per week. Prerequisite: ROTC Basic Course Credit. (F)

MSL 402 Leadership in a Complex World 3(2-2)
Explores the dynamics of leading in complex situations of the current operating environment (COE). Includes advanced instruction in law of war and interaction with nongovernmental organizations (NGOs). Field work once weekly. Physical training required three times per week. Prerequisite: ROTC Basis Course Credit. (S)

MSL 485 Special Studies in Leadership 1(1-0)
Course for students participating in the Army ROTC Advanced Course that want to pursue further studies in military leadership and group dynamics. May be repeated for credit. Prerequisite: by arrangement with the professor of Military Science only. (F,S) Repeatable

## MUSIC (MUS)

## UNDERGRADUATE COURSES

MUS 100 Music Fundamentals I: Notation 2(2-0)
An overview of the basic elements and principles of music notation and their application to performance. (*)
MUS 101 Music Performance Symposium I (0, 1 VAR) Level one course in observation and critique of music performances, includes lectures, clinics, demonstrations, and performance preparation. Weekly critiques required for credit. (F,S) Repeatable (2)

MUS 102 Concert Choir I 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the choral ensemble. Additional rehearsals and performances are required. (Level I). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 103 Music and Computer Technology I 1(1-0)
Introduction to the use of computer technology in music, including digital audio, MIDI, composing, sequencing, performing, and printing, utilizing various software applications. Prerequisite: permission of instructor. ( $F, S$ )

MUS 104 Collaborative Music Ensemble I 1(0-2)
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations. Prerequisite: permission of instructor (*) Repeatable (2)

MUS 105 Music Fundamentals II: Foundations 2(2-0)
A study of the basic principles of music theory relating to musical composition. Prepares students for success in the Music Theory sequence. (*)

## MUS 107 University Band I 1(0-2.5)

Provides a Concert Band performing opportunity for students from all disciplines across campus. Prerequisite: director approval. (S)

MUS 108 Vocal Jazz Ensemble I 1(0-2.5)
Level one secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal jazz ensemble literature. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 109 Chamber Choir I 1(0-2.5)
Level one primary ensemble for vocal majors specializing in the rehearsal, study, and public performance of advanced choral literature. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 112 Wind Ensemble I 1(0-2.5)

Rehearsal, study, and public performance of selected appropriate literature for the wind band. Additional rehearsals and performances are required. (Level I). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 113 Vocal Techniques and Diction 1(0-2)
Instruction in the fundamentals of singing from a pedagogical approach. Additional basic instruction in foreign language pronunciation. Primarily intended for students in Music Education. (F,S)
MUS 114 Brass Ensemble I 1(0-2.5)
Level one music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of brass instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 115 Mariachi Ensemble I ( 0 -1)

Level one music ensemble specializing in the rehearsal, study and performance of appropriate literature in the Mariachi style. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)
MUS 116 ThunderWolves Drumline I 1(0-2.5)
Provides an indoor drumline ensemble option for students from across campus who desire to expand their performance knowledge of percussion and other appropriate instruments. Prerequisite: director approval. (S)

MUS 118 Music Appreciation 3(3-0)
Significant musical compositions, composers and historical eras; analysis and description of music forms and terms; includes women composers and multi-cultural issues. (F,S)
MUS 120 History of Jazz 3(3-0)
Study of historical trends and developments in jazz, including significant performers, styles, composers, and compositions. (*)

MUS 121 Chamber Ensemble I 1(0-2.5)
Level one secondary ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of string instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 124 Percussion Ensemble I 1(0-2.5)

Level one ensemble specializing in rehearsal, study, and performance of appropriate literature for combinations of percussion instruments. Additional rehearsals and performance activities are required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 125 Piano Class for Non-Majors 1(0-2)

An elective course for the piano beginner or intermediate player who wishes to increase personal skill at the keyboard. ( $\mathrm{S} / \mathrm{U}$ grading) ( $\mathrm{F}, \mathrm{S}$ ) Repeatable (2)

## MUS 127 Functional Piano I: Beginning 1(0-2)

For students with no piano experience. Introduces fundamentals, with emphasis on providing skills necessary for successful completion of the Proficiency Exam. May be repeated. ( $\mathrm{F}, \mathrm{S}$ ) Repeatable (2)

## MUS 130 Guitar Class 1 (0-2)

Basic instruction in guitar technique in a group setting. Application of both melodic and chordal (rhythmic) media. Primarily for the non-music major/minor. (*) Repeatable

## MUS 131 Pep Band 1(0-2.5)

Provides functional music at various home athletic events and select special occasions while serving as a laboratory of learning for future music educators. (S) Repeatable (2)

MUS 132 Guitar Ensemble, Classical I 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate classical guitar literature. Additional rehearsals and performance activities are required. (Level I) Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 134 Woodwind Ensemble I 1(0-2.5)
Level one ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of woodwind instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 135 Marching Band I (0-8)
Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators. Prerequisite: instructor permission (F)

MUS 136 Guitar Ensemble, Jazz I ( 0 -2.5)
Level one rehearsal, study and public performance of selected appropriate non-classical guitar literature. Additional rehearsals and performance activities are required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 142 Piano Ensemble I 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate piano ensemble literature. Additional rehearsals and performance activities are required. (Level I). Prerequisite: permission of instructor. $(F, S)$ Repeatable (2)

MUS 144 Orchestra I 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra. Additional rehearsals and activities are required. (Level I). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 150 Music Theory I 2(2-1)
Introduction to diatonic harmony and part-writing, including basic musical form, structure and analysis. Based on 18th century common practice", includes analysis of appropriate representative literature. Prerequisite: successful completion of MUS 100 and 105 recommended (or satisfactory completion of theory placement examination). Corequisite: MUS 151. (F)

## MUS 151 Aural Skills 2(1-2)

Development of basic aural skills, including diatonic harmony, interval recognition, singing at sight, error detection, and rhythmic, melodic, and harmonic discriminatory listening. Corequisite: MUS 150. (F,S)

MUS 152 Jazz Improvisation I 2(2-0)
Introduction to theory and techniques of improvisation in various styles of jazz. Includes developing familiarity with various representative jazz artists. May be repeated for credit. Prerequisite: permission of instructor. (F) Repeatable (6)

MUS 154 Jazz Ensemble I 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the jazz ensemble. Additional rehearsals and performances are required. (Level I). Prerequisite: permission of instructor. $(F, S)$ Repeatable (2)

MUS 160-179 Applied, non major $\mathbf{1 ( 0 - 5 )}$
Applied music study in various performance areas for the nonmusic major. One half-hour lesson per week; time to be arranged with the instructor. Prerequisite: permission of instructor. (F,S)-(160-Violin) (161-Viola) (162-Cello) (163Bass) (164-Flute) (165-Oboe) (166-Bassoon) (167-Clarinet) (168-Saxophone) (169-Voice) (170-Trumpet) (171-French Horn) (172-Trombone) (173-Euphonium) (174-Tuba) (175Percussion) (176-Piano) (177-Organ) (178-Classical Guitar) (179-non-Classical Guitar). Repeatable
MUS 201 Music Performance Symposium II (0, 1, VAR) Level two course in observation and critique of music performances; includes lectures, clinics, demonstrations, and performance preparation. Weekly critiques required for credit. Prerequisite: MUS 101. (F,S) Repeatable (2)

MUS 202 Concert Choir II 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the choral ensemble. Additional rehearsals and performances are required. (Level II). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 203 Electronic Music 2(1-2)
In-depth study of and experiences with a variety of electronic music hardware and software. Includes sound recording and engineering practices. (*) Repeatable

MUS 204 Collaborative Music Ensemble II 1(0-2)
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations. Prerequisite: permission of instructor. (*) Repeatable (2)
MUS 207 University Band II 1(0-2.5)
Provides a Concert Band performing opportunity for students from all disciplines across campus. Prerequisite: director approval. (S)

MUS 208 Vocal Jazz Ensemble II 1(0-2.5)
Level two secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal jazz ensemble literature. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 209 Chamber Choir II 1(0-2.5)
Level two primary ensemble for vocal majors specializing in the rehearsal, study, and public performance of advanced choral literature. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 210 Music Theory II 2(2-1)

Continuation of MUS 150. Includes four-part diatonic writing, diatonic modulation, and analysis of appropriate representative literature. Prerequisite: successful completion of MUS 150. Corequisite: MUS 211. (S)
MUS 211 Aural Skills II 2(1-2)
Continuation of MUS 151. Continued development of aural skills, including diatonic harmony, interval recognition, singing at sight, error detection, and rhythmic, melodic, and harmonic discriminatory listening. Prerequisite: successful completion of MUS 151. Corequisite: MUS 210. (S)

## MUS 212 Wind Ensemble II 1(0-2.5)

Rehearsal, study, and public performance of selected appropriate literature for the wind band. Additional rehearsals and performances are required. (Level II). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 214 Brass Ensemble II 1(0-2.5)
Level two music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of brass instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 215 Mariachi Ensemble II 1(0-1)
Level two music ensemble specializing in the rehearsal, study and performance of appropriate literature in the Mariachi style. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 216 ThunderWolves Drumline II 1(0-2.5)

Provides an indoor drumline ensemble option for students from across campus who desire to expand their performance knowledge of percussion and other appropriate instruments. Prerequisite: director approval. (S)

MUS 221 Chamber Ensemble II 1(0-2.5)
Level two secondary ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of string instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 223 Percussion Techniques 1(0-2)
Instruction in the fundamentals of percussion instruments from a pedagogical approach, enabling students to effectively teach beginners. Primarily intended for students in Music Education. (F,S)

MUS 224 Percussion Ensemble II 1(0-2.5)
Level two ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of percussion instruments. Additional rehearsals and performance activities are required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 227 Func. Piano II: Int/Proficiency 1(0-2)
Continuation of MUS 127. Emphasis on providing further skills necessary for successful completion of the Proficiency Exam. May be repeated. Prerequisite: successful completion of MUS 127. (F,S) Repeatable

## MUS 229 Piano Proficiency Completion 1(0-1)

One-half hour private lesson per week in which to complete the preparation for and take the Piano Proficiency Exam. Prerequisite: successful completion of MUS 127 and 227, or permission of the instructor. (F,S)

MUS 230 Marching Band II $1(0-8)$
Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators. Prerequisite: instructor permission. (F)

## MUS 232 Guitar Ensemble, Classical II 1(0-2.5)

Rehearsal, study, and public performance of selected appropriate classical guitar literature. Additional rehearsals and performance activities are required. (Level II). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 233 Woodwind Techniques 1(0-2)
Instruction in the fundamentals of woodwind instruments from a pedagogical approach, enabling students to effectively teach beginners. Primarily intended for students in Music Education. ( $\mathrm{F}, \mathrm{S}$ )

MUS 234 Woodwind Ensemble II 1(0-2.5)
Level two ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of woodwind instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. ( $F, S$ ) Repeatable (2)

## MUS 236 Guitar Ensemble, Jazz II 1(0-2.5)

Rehearsal, study, and public performance of selected appropriate non-classical guitar literature. Additional rehearsals and performance activities are required. (Level II). Prerequisite: permission of instructor. (F,S) Repeatable (2)
MUS 240 Staging for Singers 1(0-1)
An elective course providing instruction in blocking and acting for singers in scenes from musical theater or opera. Prerequisite: permission of instructor. (F,S) Repeatable
MUS 242 Piano Ensemble II 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate piano ensemble literature. Additional rehearsals and performance activities are required. (Level II). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 243 String Techniques 1(0-2)
Instruction in the fundamentals of stringed instruments from a pedagogical approach, enabling students to effectively teach beginners. Primarily intended for students in Music Education. (F,S)

MUS 244 Orchestra II 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra. Additional rehearsals and activities are required. (Level II). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 250 Music Theory III 2(2-1)
A continuation of MUS 210. Applications of chromatic and altered harmonies of the Romantic, post-Romantic and premodern compositions within functional harmonic idioms. Prerequisite: successful completion of MUS 150 and 210. Corequisite: MUS 251. (F)

MUS 251 Aural Skills III 2(1-2)
Continuation of MUS 211. Continued development of aural skills, including non-diatonic harmony, interval recognition, singing at sight, error detection, and rhythmic, melodic, and harmonic discriminatory listening. Prerequisite: successful completion of MUS 211. Corequisite: MUS 250. (F)

MUS 252 Jazz Improvisation II 2(2-0)
Continuation of instruction in theory and techniques of improvisation in various styles of jazz. Includes developing familiarity with various representative jazz artists. May be repeated for credit. Prerequisite: successful completion of MUS 152 or permission of instructor. (S) Repeatable (6)
MUS 253 Brass Techniques 1(0-2)
Instruction in the fundamentals of brass instruments from a pedagogical approach, enabling students to effectively teach beginners. Primarily intended for students in Music Education. (F,S)

MUS 254 Jazz Ensemble II 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the jazz ensemble. Additional rehearsals and performances are required. (Level II) (F,S) Repeatable (2)

## MUS 260-279 Applied Music, Major 2(0-1)

In-depth applied study in various performance areas for the Freshman and Sophomore music major (may be repeated at Sophomore level). Prerequisite: declared music major, permission of instructor. (F,S)-(260-Violin) (261-Viola) (262Cello) (263-Bass) (264-Flute) (265-Oboe) (266-Bassoon) (267-Clarinet) (268-Saxophone) (269-Voice) (270-Trumpet) (271-French Horn) (272-Trombone) (273-Euphonium) (274Tuba) (275-Percussion) (276-Piano) (277-Organ) (278Classical Guitar) (279-non-Classical Guitar). Repeatable (8)

MUS 280 Music Theory IV 2(2-1)
A continuation of MUS 250. A harmonic study of the emergence of 20th century compositional techniques from chromatic functional harmonic schemes. Prerequisite: successful completion of MUS 250. Corequisite: MUS 281. (S)

## MUS 281 Aural Skills IV 2(1-2)

Continuation of MUS 251. Continued development of aural skills, including chromatic harmony, interval recognition, singing at sight, error detection, and rhythmic, melodic, and harmonic discriminatory listening. Prerequisite: successful completion of MUS 251. Corequisite: MUS 280. (S)

MUS 285 Cultural History of Popular Music 3(3-0)
A survey of the various styles of American popular music from approximately 1900 to the present including folk music, ragtime, blues, jazz, and rock. (F,S)

## MUS 291 Special Topics (1-3 VAR) (*) Repeatable

MUS 301 Music Performance Symposium III (0, 1 VAR)
Level three course in observation and critique of music performances; includes lectures, clinics, demonstrations, and performance preparation. Weekly critiques required for credit. Prerequisite: MUS 201. (F,S) Repeatable (2)

MUS 302 Concert Choir III 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the choral ensemble. Additional rehearsals and performances are required. (Level III). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 303 Music and Computer Technology II 1(0-2)
Continued study in the use of computer technology in music, including digital audio, MIDI, composing, sequencing, performing, and printing, utilizing various software applications. Prerequisite: MUS 103. (F,S)

MUS 304 Collaborative Music Ensemble III 1(0-2)
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations. Prerequisite: permission of instructor. (*) Repeatable (2)

MUS 305 Music History I 3(3-0)
An in-depth study of music history and representative literature from Antiquity to the Classical period. Prerequisite: successful completion of MUS 118, 150, 210. (F)

MUS 306 Technology for Music Educators 2(2-1)
Applies educational technology to the classroom and performance activities of music teachers, including instruction, communication, sound recording and editing. Prerequisite: MUS 150, 151, 210, 211. (F,S)

MUS 307 University Band III 1(0-2.5)
Provides a Concert Band performing opportunity for students from all disciplines across campus. Prerequisite: director approval. (S)
MUS 308 Vocal Jazz Ensemble III 1(0-2.5)
Level three secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal jazz ensemble literature. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. ( $F, S$ ) Repeatable (2)

## MUS 309 Chamber Choir III 1(0-2.5)

Level three primary ensemble for vocal majors specializing in the rehearsal, study, and public performance of advanced choral literature. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 312 Wind Ensemble III 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the wind band. Additional rehearsals and performances are required. (Level III). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 314 Brass Ensemble III 1(0-2.5)
Level three music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of brass instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 315 Mariachi Ensemble III 1(0-1)

Level three music ensemble specializing in the rehearsal, study and performance of appropriate literature in the Mariachi style. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 316 ThunderWolves Drumline III 1(0-2.5)

Provides an indoor drumline ensemble option for students from across campus who desire to expand their performance knowledge of percussion and other appropriate instruments. Prerequisite: director approval. (S)

MUS 321 Chamber Ensemble III 1(0-2.5)
Level three secondary ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of string instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. ( $F, S$ ) Repeatable (2)

MUS 323 Diction for Singers 2(2-0)
A course in reading pronunciation of Italian, French, German, Latin, and Spanish for singers. Utilizes the International Phonetic Alphabet. Primarily for vocal music students. (*)

MUS 324 Percussion Ensemble III 1(0-2.5)
Level three ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of percussion instruments. Additional rehearsals and performance activities are required. Prerequisite: permission of instructor. (F,S) Repeatable (2)
MUS 326 Guitar Pedagogy I: Adv Sightreading 2(0-2)
Focus on advanced knowledge of the fretboard, harmony, sightreading, and arranging for guitar. Prerequisite: successful completion of junior qualifying exam, or consent of the instructor. (*)

MUS 327 Guitar Pedagogy II: History \& Lit 2(0-2)
Focus on evolution of guitar notation and representative repertoire of each historical period. Prerequisite: successful completion of junior qualifying exam, or consent of the instructor. (*)

MUS 330 Marching Band III 1(0-8)
Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators. Prerequisite: instructor permission. (F)

## MUS 331 Pep Band 1(0-2.5)

Provides functional music at various home athletic events and select special occasions while serving as a laboratory of learning for future music educators. (S) Repeatable (2)

MUS 332 Guitar Ensemble, Classical III 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate classical guitar literature. Additional rehearsals and performance activities are required. (Level III). Prerequisite: permission of instructor. ( $\mathrm{F}, \mathrm{S}$ ) Repeatable (2)

MUS 334 Woodwind Ensemble III 1(0-2.5)
Level three ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of woodwind instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 336 Guitar Ensemble, Jazz III 1(0-2.5)

Rehearsal, study, and public performance of selected appropriate non-classical guitar literature. Additional rehearsals and performance activities are required. (Level III). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 340 General Music Methods 2(2-1)
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of general music in the public schools. Prerequisite: admission to Teacher Education Program. ( $\mathrm{F}, \mathrm{O}$ )

MUS 342 Piano Ensemble III 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate piano ensemble literature. Additional rehearsals and performance activities are required. (Level III). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 344 Orchestra III 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra. Additional rehearsals and activities are required. (Level III). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 346 Piano Literature 2(2-0)
Survey of piano literature from the 18th-century to the present. (*)
MUS 347 Piano Pedagogy 2(2-0)
Introduction to the practices in teaching private and class piano. (*)

MUS 350 Theory V-Composition and Analysis 3(3-0)
Analysis and application of compositional techniques in music from all style periods, including form, harmony, and style. Prerequisite: successful completion of MUS 280. (*)

MUS 354 Jazz Ensemble III 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the jazz ensemble. Additional rehearsals and performances are required. (Level III). Prerequisite: permission of instructor. $(F, S)$ Repeatable (2)

MUS 355 Music History II 3(3-0)
An in-depth study of music history and representative literature from the Classical period to the present. Prerequisite: successful completion of MUS 305. (S)

MUS 357 Orchestration and Arranging 3(3-0)
Instruction and application in techniques of scoring music for various combinations of musical mediums. Includes scoring for strings, woodwinds, brasses, percussion, and voices. Prerequisite: successful completion of MUS 150, 151, 210, 211, 250, 251, 280, 281. (F)

## MUS 358 Basic Conducting 2(2-0)

Instruction in the conducting of music, with an emphasis on building basic skills and techniques. Prerequisite: successful completion of MUS 150, 151, 210, 211, 250, 251, 280, 281 , 357. (S)

## MUS 359 Advanced Conducting 2(0-1)

Continuing instruction in the conducting of music in the student's choice of emphasis areas. Individualized instruction in the form of one private lesson per week. Prerequisite: successful completion of MUS 358. (F)
MUS 360-379 Applied Music, Major 2(0-1)
In-depth applied study in various performance areas for the Junior music major. Prerequisite: admission to upper-class status; declared music major, permission of instructor. (F,S)-(360-Violin) (361-Viola) (362-Cello) (363-Bass) (364-Flute) (365-Oboe) (366-Bassoon) (367-Clarinet) (368-Saxophone) (369-Voice) (370-Trumpet) (371-French Horn) (372Trombone) (373-Euphonium) (374-Tuba) (375-Percussion) (376-Piano) (377-Organ) (378-Classical Guitar) (379-nonClassical Guitar). Repeatable (4)

MUS 380-399 Junior Recital 2(0-1)
In-depth applied study in various performance areas for the Junior music major, leading to the performance of a solo or joint recital (see Music Student Handbook). Prerequisite: admission to upper-class status; faculty approval; permission of instructor. (F,S)-(380-Violin) (381-Viola) (382-Cello) (383Bass) (384-Flute) (385-Oboe) (386-Bassoon) (387-Clarinet) (388-Saxophone) (389-Voice) (390-Trumpet) (391-French Horn) (392-Trombone) (393 Euphonium) (394-Tuba) (395Percussion) (396-Piano) (397-Organ) (398-Classical Guitar) (399-non-Classical Guitar).

MUS 401 Music Performance Symposium IV (0, 1 VAR) Level four course in observation and critique of music performances; includes lectures, clinics, demonstrations, and performance preparation. Weekly critiques required for credit. Prerequisite: MUS 301. (F,S) Repeatable (2)

## MUS 402 Concert Choir IV 1(0-2.5)

Rehearsal, study, and public performance of selected appropriate literature for the choral ensemble. Additional rehearsals and performances are required. (Level IV). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 404 Collaborative Music Ensemble IV 1(0-2)
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations. Prerequisite: permission of instructor. (*) Repeatable (2)

## MUS 407 University Band IV 1(0-2.5)

Provides a Concert Band performing opportunity for students from all disciplines across campus. Prerequisite: director approval. (S)

MUS 408 Vocal Jazz Ensemble IV 1(0-2.5)
Level four secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal jazz ensemble literature. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)
MUS 409 Chamber Choir IV 1(0-2.5)
Level four primary ensemble for vocal majors specializing in the rehearsal, study, and public performance of advanced choral literature. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 412 Wind Ensemble IV 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the wind band. Additional rehearsals and performances are required. (Level IV). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 414 Brass Ensemble IV 1(0-2.5)
Level four music ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of brass instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)
MUS 415 Mariachi Ensemble IV 1(0-1)
Level four music ensemble specializing in the rehearsal, study and performance of appropriate literature in the Mariachi style. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 416 ThunderWolves Drumline IV 1(0-2.5)
Provides an indoor drumline ensemble option for students from across campus who desire to expand their performance knowledge of percussion and other appropriate instruments. Prerequisite: director approval. (S)

## MUS 421 Chamber Ensemble IV 1(0-2.5)

Level four secondary ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of string instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 424 Percussion Ensemble IV 1(0-2.5)

Level four ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of percussion instruments. Additional rehearsals and performance activities are required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 430 Marching Band IV 1(0-8)

Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators. Prerequisite: instructor permission. (F)

MUS 432 Guitar Ensemble, Classical IV 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate classical guitar literature. Additional rehearsals and performance activities are required. (Level IV). Prerequisite: permission of instructor. ( $F, S$ ) Repeatable (2)

MUS 434 Woodwind Ensemble IV 1(0-2.5)
Level four ensemble specializing in the rehearsal, study, and performance of appropriate literature for combinations of woodwind instruments. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 436 Guitar Ensemble, Jazz IV 1(0-2.5)

Rehearsal, study, and public performance of selected appropriate non-classical guitar literature. Additional rehearsals and performance activities are required. (Level IV). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 440 Choral Music Methods 2(2-1)
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of choral music in the public schools. Prerequisite: successful completion of MUS 113, 223, 233, 243, 253, admission to Teacher Education Program. ( $\mathrm{S}, \mathrm{O}$ )

MUS 441 Instrumental Music Methods 2(2-1)
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of instrumental music in the public schools. Prerequisite: successful completion of MUS 113, 223, 233, 243, 253, admission to Teacher Education Program. Corequisite: MUS 440. (S)

MUS 442 Piano Ensemble IV 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate piano ensemble literature. Additional rehearsals and performance activities are required. (Level IV). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 444 Orchestra IV $1(0-2.5)$
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra. Additional rehearsals and activities are required. (Level IV). Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 445-449 Applied Music, Major 2(0-1)

In-depth applied study in various performance areas for the Senior music major. Prerequisite: admission to upper-class status; declared music major, permission of instructor. (F,S)-(445-Violin) (446-Viola) (447-Cello) (448-Bass) (449-Flute). Repeatable (4)

MUS 454 Jazz Ensemble IV 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the jazz ensemble. Additional rehearsals and performances are required. (Level IV). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 455-459 Applied Music, Major 2(0-1)
In-depth applied study in various performance areas for the Senior music major. Prerequisite: admission to upper-class status; declared music major, permission of instructor. ( $F, S$ )-(455-Oboe) (456-Bassoon) (457-Clarinet) (458-Saxophone) (459-Voice). Repeatable (4)

MUS 460-469 Applied Music, Major 2(0-1)
In-depth applied study in various performance areas for the Senior music major. Prerequisite: admission to upper-class status; declared music major, permission of instructor. ( $F, S$ S)-(460-Trumpet) (461-French Horn) (462-Trombone) (463Euphonium) (464-Tuba) (465-Percussion) (466-Piano) (467Organ) (468-Classical Guitar) (469-non-Classical Guitar). Repeatable (4)

## MUS 470-489 Senior Recital 2(0-1)

In-depth applied study in various performance areas for the Senior music major, leading to the performance of a solo or joint recital (see Music Student Handbook). Prerequisite: admission to upper-class status; faculty approval; permission of instructor. (F,S)-(470-Violin) (471-Viola) (472-Cello) (473Bass) (474-Flute) (475-Oboe) (476-Bassoon) (477-Clarinet) (478-Saxophone) (479-Voice) (480-Trumpet) (481-French Horn) (482-Trombone) (483-Euphonium) (484-Tuba) (485Percussions) (486-Piano) (487-Organ) (488-Classical Guitar) (489-non-Classical Guitar).

MUS 491 Special Topics (1-4 VAR)
Prerequisite: permission of instructor. (F,S,SS) Repeatable

## MUS 495 Independent Study (1-4 VAR) (*)

## GRADUATE COURSES

MUS 501 Special Methods in Music Ed 3(3-0)
In-depth study of techniques and materials for teaching music in the elementary and middle school. Involvement in research and practical application of approved methods. Prerequisite: graduate standing. (*) Repeatable

## MUS 502 Concert Choir V 1(0-2.5)

Primary ensemble for vocal majors, specializing in the rehearsal, study, and public performance of advanced choral literature. Additional rehearsals and performance activities required. (Graduate level) Prerequisite: instructor permission. (F,S) Repeatable (4)
MUS 504 Collaborative Music Ensemble V 1(0-2)
Ensemble specializing in small chamber works for piano, winds, strings, in various combinations. Prerequisite: permission of instructor. (*) Repeatable (2)

## MUS 509 Chamber Choir V 1(0-2.5)

Primary ensemble for vocal majors, specializing in the rehearsal, study, and public performance of advanced choral literature. Additional rehearsals and performance activities required. (Graduate level) Prerequisite: permission of instructor. (F,S) Repeatable (4)

## MUS 512 Wind Ensemble V 1(0-2.5)

Rehearsal, study, and public performance of appropriate literature for the wind band. Additional rehearsals and performances are required. (Graduate level) Prerequisite: instructor permission. (F,S) Repeatable (4)

MUS 513 Advanced Vocal Pedagogy 1(0-1)
Designed for the experienced vocal music teacher who seeks graduate-level pedagogical techniques to better guide and develop the adolescent voice. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

## MUS 520 Graduate Music Ensemble 1(0-2.5)

Secondary ensembles specializing in the rehearsal, study, and public performance of specific genres, i.e., jazz, chamber music. (Graduate level) Prerequisite: permission of instructor. (*) Repeatable (4)

MUS 523 Advanced Percussion Pedagogy 1(0-1)
Designed for the experienced instrumental music teacher who seeks graduate-level pedagogical techniques to improve students' achievement in playing instruments of the percussion family. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

## MUS 530 Marching Band V 1(0-8)

Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators. Prerequisite: instructor permission. (F) Repeatable (2)

## MUS 531 Pep Band 1(0-2.5)

Provides functional music at various home athletic events and select special occasions while serving as a laboratory of learning for future music educators. (S) Repeatable (2)
MUS 533 Advanced String Pedagogy 1(0-1)
This course expands upon the basics of string pedagogy and literature. Includes discussion of problems and possible solutions in student playing techniques. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (*)

MUS 540 Kodály Method for Elementary Music 3(3-0)
Graduate study in teaching music to young children. Students will create teaching aids and increase their own solfege proficiency. Primarily for teachers of general music. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)
MUS 543 Advanced Woodwind Pedagogy 1(0-1)
Designed for the experienced instrumental music teacher who seeks advanced techniques in the teaching and playing of woodwind instruments. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 544 Orchestra V 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra. Additional rehearsals and activities are required. (Level V) Prerequisite: instructor permission. (F,S) Repeatable (4)

MUS 545 Current Issues in Music Education 3(3-0)
History and philosophy of music education in public schools, with readings, discussions, and practical applications of content standards in instruction and assessment. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 550 Instrumental Conducting 3(3-0)
Graduate level instruction in instrumental conducting in a pedagogical setting with emphasis on selection of appropriate literature as well as technique. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 553 Advanced Brass Pedagogy 1(0-1)
Designed for the experienced instrumental music teacher who seeks graduate-level pedagogical techniques to improve students' achievement in playing instruments of the brass family. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

## MUS 559 Advanced Music Analysis 3(3-0)

Analytical study of selected varied compositions, primarily from the perspective of a school ensemble conductor. Includes instructional strategies and criteria for selecting appropriate quality literature. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS)

MUS 560 Choral Conducting 3(3-0)
Graduate level instruction in choral conducting in a pedagogical setting with emphasis on selection of appropriate literature as well as technique. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 565 Methods of Research in Music ED 3(3-0)
This course provides a broad foundation in research design and methodologies for graduate students in music education. Quantitative and qualitative analytical procedures are introduced. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (*)
MUS 570 Advanced Applied Music, Strings 2(0-1)
In-depth applied study in guitar or orchestral string performance areas for the highly advanced student. Prerequisite: permission of instructor. (*) Repeatable (4)

MUS 571 Advanced Applied Music, Woodwinds 2(0-1)
In-depth applied study in woodwind performance areas for the highly advanced student. Prerequisite: permission of instructor. (*) Repeatable (4)

MUS 572 Advanced Applied Music, Percussion 2(0-1)
In-depth applied study in percussion performance for the highly advanced student. Prerequisite: permission of instructor. (*) Repeatable (4)

MUS 573 Advanced Applied Music, Brass 2(0-1)
In-depth applied study in brass performance areas for the highly advanced student. Prerequisite: permission of instructor. (*) Repeatable (4)

MUS 574 Advanced Applied Music, Voice 2(0-1)
In-depth applied study in vocal performance for the highly advanced student. Prerequisite: permission of instructor. (*) Repeatable (4)

MUS 591 Special Topics (1-3 VAR)
Prerequisite: graduate standing. (*) Repeatable
MUS 593 Seminar (1-3 VAR)
Practical application of current music techniques to secondary teaching. Prerequisite: graduate standing. (*) Repeatable

## NURSING (NSG)

## UNDERGRADUATE COURSES

NSG 207 Nursing Pathophysiology 3(3-0)
Introduces basic disease processes of individual body systems. Incorporates nursing assessment/diagnosis with associated intersystem diseases utilizing evidence-based practice and patient-centered, safe care. Prerequisite: BIOL 223/L, BIOL 224/L. (F,S)

NSG 230 (WS 230) Women, Health and Society 3(3-0) Introduction to women's health issues and a basic understanding of how women's health has been influenced historically, culturally and by socio-economic factors. (F,S)

NSG 231 Concepts for Professional Nursing 2(2-0)
Introduces nursing history, theory, and key concepts related to healthcare and professional integrity and leadership. Prerequisite: all nursing prerequisite and general education courses. Admission into the nursing program or by permission. (S,SS)

## NSG 232 Fundamentals of Nursing Care 3(3-0)

Utilizes the nursing process to provide safe, patient-centered care. Emphasizes teamwork, collaboration, evidence-based practice, and quality improvement. Prerequisite: admission into Nursing Program. Prerequisite: all nursing prerequisite and general education courses. Corequisite: NSG 232 L . (S,SS)

NSG 232L Fundamentals of Nursing Care Lab 4(0-8) Application of NSG 232. Assists students to develop fundamental competencies to provide safe, evidenced-based patient-centered care. Corequisite: NSG 232. (S/U grading) ( $\mathrm{S}, \mathrm{SS}$ )

## NSG 291 Special Topics (1-4 VAR)

Topics and/or nursing skills for enrichment of required nursing courses, and which serve the interest of 10 or more students will be considered. Prerequisite: permission of instructor. (*) Repeatable

## NSG 295 Independent Study (1-6 VAR) (*) Repeatable

NSG 302 Health Promotion and Assessment 2(2-0)
Utilizes evidence-based practice to assess, analyze and promote health in diverse populations across the lifespan. Prerequisite: admission into the Nursing Program or RN. Corequisite: NSG 232, NSG 302L. (S,SS)
NSG 302L Health Promotion and Assessment Lab 1(0-2) Fosters evidence-based practice and clinical judgment to develop comprehensive assessment skills across the lifespan. Pre or corequisite: NSG 207, 307, or RN. Corequisite: NSG 302. (S/U grading) (S,SS)

NSG 305 Ethical Issues in Health Care 3(3-0)
Introduces evidence-based theories which influence ethical issues in health care. Prerequisite: permission of instructor. (*)

## NSG 307 Health and Disease Systems 3(3-0)

Integrates basic disease processes with nursing assessment/diagnosis utilizing evidence-based practice and patient-centered, safe care. Prerequisite: BIOL 223/L, BIOL 224/L; NSG 232/L or equivalent. (F,S)

NSG 308 Pharmacology in Nursing Practice 3(3-0)
Applies pharmacokinetics, pharmacodynamics, and pharmacotherapeutics to patient-centered care. Focuses on safety, legal implications and evidence-based practice. Prerequisite: completion of all required 200 level nursing courses or by permission. Corequisite: NSG 312 or NSG 332 or by permission. (F,SS)

## NSG 309 Professional Nursing Practice 4(4-0)

Introduces the mission and philosophy of the nursing program, professional nursing practice and personal growth. Utilizes concepts of evidence-based, patient-centered care. Prerequisite: Registered Nurse License. (F)

## NSG 311 Concepts for Professional Nursing 4(4-0)

Synthesizes concepts and theory of maternal, neonatal, pediatric and mental health related to professional nursing. Focuses on evidenced-based practice, teamwork and collaboration. Prerequisite: Registered Nurse License. (S)
NSG 312 Caring for Childbearing Family 3(3-0)
Introduces safe, patient-centered care of the neonate and procreative family during the peri-natal period. Includes health promotion, high risk management, safety and human sexuality. Prerequisite: completion of all required 200 level nursing courses, NSG 302/302L. (F,S)

NSG 312L Caring for Childbearing Family Lab 3(0-6)
Application of NSG 312. Provides evidence-based, patientcentered care to the neonate and family throughout the perinatal period. Corequisite: NSG 312. (S/U grading) (F,S)

NSG 322 Caring for Adults I 4(4-0)
Integrates assessment, pharmacology and pathophysiologic concepts utilizing evidence-based practice to provide safe, patient-centered care to adults with acute and chronic health concerns. Prerequisite: completion of all required 200 level nursing courses; NSG 302/302L. Corequisite: NSG 322L. (F,S)

## NSG 322L Caring for Adults I Lab 4(0-8)

Application of NSG 322. Provides evidence-based, patientcentered care to adults and families based upon best practices. Corequisite: NSG 322. (S/U grading) (F,S)

NSG 331 Healthy Aging 2(2-0)
Utilizes evidence-based practice theories to promote healthy aging and patient-centered care of older adults. Prerequisite: admission into the Nursing Program; all general education and nursing prerequisite courses or by permission. Corequisite: NSG 232, NSG 302 or by permission. (S,SS)

NSG 332 Caring for Children/Families 3(3-0)
Introduces patient-centered care of children, adolescents and their families. Emphasizes evidence-based practice related to health promotion, safety and disease management. Prerequisite: completion of all required 200 level nursing courses; NSG 302/302L. Corequisite: NSG 332L. (F,S)

NSG 332L Caring for Children/Families Lab 3(0-6)
Application of NSG 332. Provides evidence-based, patientcentered care of children, adolescents, and families. Corequisite: NSG 332. (S/U grading) (F,S)

NSG 351 Evidence Based Nursing Practice 3(3-0)
Critically analyzes and applies nursing research to practice. Uses evidence-based practice to promote continuous quality improvement and patient-centered care. Prerequisite: MATH 156 , completion of all required 200 level nursing courses. (S)

NSG 371 Healthcare Informatics 2(2-0)
Introduces theory, infrastructure and ethical application of health informatics for the delivery of safe, effective, efficient, and quality patient-centered care. Pre or corequisite: NSG 231, 232 or by permission. (S)
NSG 372 Clinical Practicum I 3(0-9)
Provides an opportunity for a concentrated clinical practicum with instructor approval. Prerequisite: completion of all 300 level nursing courses. (S/U grading) (SS/*) Repeatable (6)

NSG 382 Dynamics of Behavioral Health 3(3-0)
Introduces evidence-based concepts focusing on mental health promotion and disease specific patient-centered care. Prerequisite: NSG, 302/302L. Pre or corequisite: NSG 308. (F,S)
NSG 382L Dynamics of Behavioral Health Lab 3(0-6)
Application of NSG 382. Provides evidence-based, patientcentered care in behavioral health settings. Corequisite: NSG 382. (S/U grading) (F,S)

NSG 391 Special Topics (1-5 VAR)
Prerequisite: permission of instructor. (*) Repeatable
NSG 401 Synthesis of Parenteral IV Therapy 2(1.5-0.5)
Concepts of Parenteral IV therapy with application of critical thinking and evidence-based practice in the clinical setting. For senior CSU-Pueblo nursing students taking the PNNCLEX. Prerequisite: completion of all required 200/300 level nursing courses. (S/U grading) (SS)

NSG 408 Synthesis of Pharmacologic Concepts 2(2-0)
Synthesizes pharmacological concepts and prototype agents with focus on the physiological action, effect and utilization of selected drug groups in evidence-based practice. Prerequisite: completion of all required 200/300 level nursing courses. (S)

NSG 420 Caring for Adults II 4(4-0)
Integrates assessment, pharmacology and pathophysiology concepts using evidence-based practice to provide patientcentered care to adults with complex health concerns. Prerequisite: completion of all required 300 level nursing courses or by permission. Corequisite: NSG 420L. (F,S)

NSG 420L Caring for Adults II Lab 4(0-8)
Application of NSG 420. Provides patient centered care to adults and families utilizing evidence-based practice. Emphasizes teamwork and collaboration for multiple patients. Prerequisite: completion of all required 300 level nursing courses or by permission. Corequisite: NSG 420. (S/U grading) (F,S)

NSG 431 Gerontological Nursing 3(3-0)
Synthesizes evidence-based practice theories and integrates concepts of healthy aging to promote patient-centered care of older adults. Prerequisite: successful completion of junior level nursing courses or RN status or by permission. (*)

NSG 442 Global Public Health 3(3-0)
Synthesizes theory, research, epidemiological and public health principles into planning interventions to meet the multidimensional health needs of a diverse, global society. Prerequisite: completion of all required 300 level nursing courses or by permission. Corequisite: NSG 442L. (F,SS)
NSG 442L Global Public Health Lab 3(0-6)
Application of NSG 442. Provides population-focused care in community health settings. Prerequisite: completion of all required 300 level nursing courses. Corequisite: NSG 442. (S/U grading) (F,SS)

NSG 451 Nursing Leadership and Issues 3(3-0)
Analyzes management and leadership theories. Explores issues related to quality improvement, evidence-based practice, professional integrity/leadership and teamwork/ collaboration. Prerequisite: completion of NSG 420 and NSG 442. Corequisite: NSG 452 or by permission. (S,SS)

NSG 452 Comprehensive Nursing Practice 4(4-0)
Prepares for transition into professional nursing practice. Integrates patient-centered care concepts for a variety of health needs across the lifespan. Prerequisite: NSG 420/420L, 442/442L. Corequisite: 452L. (S,SS)

NSG 452L Comprehensive Nursing Practice Lab 5(0-10) Application of NSG 452. Manages multiple, complex patients in a variety of health care settings utilizing evidence-based practice. Emphasizes integrity, leadership, team work and collaboration. Corequisite: NSG 452. (S/U grading) (S,SS)

NSG 472 Clinical Practicum II 3(0-9)
Provides an opportunity for a concentrated clinical specialty practicum with instructor approval. Prerequisite: NSG 372 or by permission. (S/U grading) (S) Repeatable (6)

NSG 491 Special Topics (1-6 VAR) (*) Repeatable
NSG 492 Research 2(2-0)
Faculty-directed research project for undergraduate student. Prerequisite: NSG 351. (*)

NSG 495 Independent Study (1-6 VAR) (*) Repeatable

## GRADUATE COURSES

NSG 506 Roles, Ethics \& Issues 3(2.5-2)
Explores advanced nursing practice roles and competencies emphasizing clinical quality, safety and ethical issues. Clinical hours required. Prerequisite: admission to Graduate Nursing Program or by permission. (F)

## NSG 508 Advanced Practice Theory 3(3-0)

Examines the theoretical basis of nursing which guides evidence-based advanced nursing practice, research, education, and administration. Prerequisite: admission to Graduate Nursing Program or by permission. (F)

NSG 510 Small Office Procedures 1(1-0)
Examines the theoretical and practical components of small office procedures within the scope of advanced practice nursing. Prerequisite: admission to Graduate Nursing Program or permission. (F)

NSG 511 Orthopedics Procedures 1(1-0)
Examines the theoretical and practical components of orthopedic procedures and associated basic x-ray interpretation within the scope of advanced practice nursing. Prerequisite: admission to Graduate Nursing Program or permission. (F)

## NSG 512 Cardiovascular Management 1(1-0)

Examines the theoretical and practical components of cardiac electrocardiograms with connection to advanced coronary syndrome, peripheral vascular disease and simulation as a provider. Prerequisite: admission to Graduate Nursing Program or permission. (F)

NSG 513 Pulmonary Evaluation and Management 1(1-0) Examines the theoretical/practical components of pulmonary evaluation/management including advanced airway management and insertion of central lines within the scope of advanced practice nursing. Prerequisite: admission to Graduate Nursing Program or permission. (S)
NSG 514 Women's Health \& Pre/Post Natal Care 2(2-0)
Examines the theoretical and practical components women's health and pre/post natal care within the scope of advance practice nursing. Prerequisite: admission to Graduate Nursing Program or permission. (S)
NSG 522 Psychiatric Evaluation of Adults 1(1-0)
Overview of history taking, physical finding, and the psychiatric interview in planning care for the adult psychiatric patient. Prerequisite: admission to the Graduate Nursing Program or permission of the course instructor. (SS)

NSG 523 Psychological Assessment of Adults 1(1-0)
Course includes psychological assessment of the adult; components of the mental status examination. Includes review of psychological tests commonly used for diagnosis of adults. Prerequisite: admission to the Graduate Nursing Program or permission of the course instructor. (SS)

## NSG 524 Psychiatric Differential Diagnosis 2(2-0)

Course provides review of categorical classification of mental disorders in adults with defining features. Diagnostic criteria are presented as a basis for diagnosis and treatment. Prerequisite: admission to the Graduate Nursing Program or permission of the course instructor. (F)

NSG 550 Health Policy \& Finance 3(3-0)
Analyze and utilize the historical, political, economic, and financial concepts in the development of one's practice and the advanced practice role. Prerequisite: admission to Graduate Nursing Program or by permission. (SS)

NSG 551 Health Promotion 2(2-0)
Analyzes concepts of health promotion related to delivery of evidence-based patient-centered care in advanced nursing practice. Prerequisite: admission to Graduate Nursing Program or by permission. (F)

NSG 552 Advanced Pathophysiology 3(3-0)
Examines alterations in human physiologic function in diverse populations across the lifespan using evidence-based practice principles. Prerequisite: completion of courses per degree plan or by permission. (S)

## NSG 561 Advanced Pharmacology 3(3-0)

Applies pharmacological concepts in the management of patients across the lifespan within the scope of evidencebased advanced nursing practice. Prerequisite: completion of courses per degree plan or by permission. (SS)

NSG 562 Advanced Assessment 2(2-0)
Enhances assessment skills across the lifespan within the scope of evidence-based advanced nursing practice. Prerequisite: completion of courses per degree plan or by permission. Corequisite: NSG 562L. (S)

NSG 562L Advanced Assessment Lab 1(0-2)
Demonstrates assessment skills across the lifespan within the scope of evidence-based advanced nursing practice. Corequisite: NSG 562. (S/U Grading) (S)

NSG 571 Healthcare Informatics 2(2-0)
Analyzes theory, infrastructure and ethical application of health informatics for the delivery of quality advanced nursing practice. Prerequisite: completion of courses per degree plan or by permission. (S)

NSG 575 Curriculum Development 2(2-0)
Focuses on theories and processes of nursing curriculum development from an evidence-based practice foundation. Prerequisite: completion of courses per degree plan or by permission. (F)

NSG 576 Instructional Strategies 3(3-0)
Explores evidence-based practice learning theories and instructional strategies for teaching nursing in a variety of settings. Prerequisite: completion of courses per degree plan or by permission. (F)

## NSG 577 Assessment \& Evaluation 2(2-0)

Focuses on understanding and applying formal and informal assessment and evaluation strategies in order to implement data-driven instruction. Prerequisite: completion of courses per degree plan or by permission (F)

NSG 581 Synthesis: Psych Mental Health NSG I 4(4-0) Synthesizes theory into practice, based on psychiatric mental health competencies and advanced practice clinical requirements. Prerequisite: completion of all core courses. Two years (4000 hours) RN clinical practice in psych mental health. Corequisite: NSG 581L. (S)

NSG 581L Synthesis Psych Mental Health I Lab 4(0-16)
Practical clinical role for the Nurse Practitioner based on psychiatric mental health competencies and advanced practice clinical requirements (240 hours). Corequisite: NSG 581. (S/U grading) (S)

NSG 582 Synthesis: Psych Mental Health NSG II 4(4-0) Synthesizes theory into practice, based on psychiatric mental health advanced practice nurse's competencies and clinical requirements. Prerequisite: NSG 581. Corequisite: NSG 582 L . (SS)

NSG 582L Synthesis Psych Mental Health II Lab 4(0-16) Practical clinical role for the Nurse Practitioner based on psychiatric mental health competencies and advanced practice clinical requirements ( 240 hours). Corequisite: NSG 582. (S/U grading) (SS)

## NSG 583 Nurse Educator Seminar 3(3-0)

Synthesizes nurse educator theory and competencies into evidence-based teaching practices. Prerequisite: completion of courses per degree plan. Corequisite: NSG 583L. (S)

NSG 583L Nurse Educator Practicum 6(0-24)
Applies nurse educator theory and competencies in a variety of educational settings. Corequisite: NSG 583. (S/U grading) (S)

## NSG 585 Acute/Chron/Emer Health Needs I 4(4-0)

Role of the Nurse Practitioner in the diagnosis and management of client's needs in fluid and electrolytes, cardiovascular-respiratory, nephrology-dialysis, transplants, GI/GU, endocrinology, nutrition, and genetics. Prerequisite: completion of all core graduate nursing courses and two years (4000 hours) RN acute clinical practice within last five years. Corequisite: NSG 585L. (S)

NSG 585L Acute/Chron/Emer Health Needs I Lab 4(0-16) Practical clinical for the Nurse Practitioner's roles in the diagnosis and management of client's needs for NSG 585 (240 clinical hours). Corequisite: NSG 585. (S/U grading) (S)

NSG 586 Acute/Chron/Emer Health Needs II 4(4-0)
Role of the Nurse Practitioner in the diagnosis and management of client's needs for neuro-trauma, otoophthalmology, oncology, women/men's health, orthopedics, immunology, palliation, gerontology. Prerequisite: completion of all core graduate nursing courses and two years (4000 hours) RN acute care clinical practice within last five years. Corequisite: NSG 586. (SS)

NSG 586L Acute/Chron/Emer Health Needs II Lab 4(0-16) Practical clinical for the Nurse Practitioner's roles in the diagnosis and management of client's needs for NSG 586 (240 clinical hours). Corequisite: NSG 586. (S/U grading) (SS)
NSG 587 Synthesis Experience 9(3-24)
Synthesizes theory into practice based on specialty competencies and advanced practice clinical requirements. This course may need to be repeated based on specialization. Prerequisite: completion of all core graduate nursing courses or by permission. (F,S,SS)

NSG 588 Family Synthesis I 2(2-0)
Introduction to family synthesis based on the family nurse practitioner competencies and advanced practice clinical requirements towards the childbearing family. Prerequisite: completion of all core graduate nursing courses and specialization plan approved by Graduate Faculty Committee. Corequisite: NSG 588L. (S)

NSG 588L Family Synthesis I Lab 2(0-8)
Role of the practitioner in the management to family synthesis based on the family nurse practitioner competencies for the childbearing family ( 120 clinical hours). Corequisite: NSG 588. (S/U grading) (S)

NSG 589 Family Synthesis II 3(3-0)
Synthesis theory into practice, based on the family nurse practitioner competencies. Prerequisite: completion of all core graduate nursing courses and specialization plan approved by Graduate Faculty Committee, NSG 588. Corequisite: NSG 589L. (F)

NSG 589L Family Synthesis II Lab 6(0-24)
Practical clinical for the Nurse Practitioner's roles in the diagnosis and management of client's needs based on the family nurse practitioner competencies (360 hours). Corequisite: NSG 589. (S/U grading) (F)

NSG 590 Special Projects (1-3 VAR)
Individual project selected, outlined and pursued by student. Prerequisite: graduate standing and advisor approval. (S/U grading) (*) Repeatable

NSG 591 Special Topics (1-6 VAR) (*) Repeatable (6)
NSG 592 Research 3(3-0)
Focuses on research methods needed for investigation and expansion of nursing knowledge. Appraisal and analysis of research and development of a proposal will be covered. Prerequisite: undergraduate statistics course; admission to the Graduate Nursing Program or by permission. (S)

## NSG 593 Thesis Seminar 3(3-0)

Creates an advanced nursing practice research proposal as the first step in thesis development. Prerequisite: completion of courses per degree plan. (S/U grading) (S)

NSG 595 Independent Study (1-6 VAR) (*) Repeatable

## NSG 599 Thesis Research (1-6 VAR)

Preparation of thesis to meet degree requirements. Must be enrolled each semester in at least one credit hour if thesis is still in process. (S/U grading). Prerequisite: NSG 593 and approval by thesis advisor. (*) Repeatable

## NSG 610 Diagnostic Reasoning 2(2-0)

Focuses on diagnostic reasoning and problem solving for the advanced practice nurse. Prerequisite: completion of courses per degree plan. (SS)

## NSG 612L Acute Care Skills Lab 2(0-4)

Applies advanced practice nursing skills for the FNP \& ACNP. Prerequisite: completion of courses per degree plan or by permission. (S/U grading) (F)

NSG 620 Acute Care Adult/Gerontology I 2(2-0)
Examines the advanced practice nurse's role in patientcentered care of adult and geriatric populations with chronic health needs. Prerequisite: completion of courses per degree plan. Corequisite: NSG 620L. (F)

NSG 620L Acute Care Adult/Gero Practicum I 4(0-12)
Explores the advanced practice nurse's role in patientcentered care of adult and geriatric populations. Corequisite: NSG 620. (S/U grading) (F)

NSG 621 Acute Care Adult/Gerontology II 4(4-0)
Examines the advanced practice nurse's role in patientcentered care of adult and geriatric population with acute health needs. Prerequisite: completion of courses per degree plan. Corequisite: NSG 621L. (S)

NSG 621L Acute Care Adult/Gero Practicum II 4(0-12)
Applies the advanced practice nurse's role in patient-centered care of adult and geriatric populations. Corequisite: NSG 621. (S/U grading) (S)

## NSG 622 Acute Care Adult/Gerontology III 4(4-0)

Examines the advanced practice nurse's role in patientcentered care of adult and geriatric populations with emergent health needs. Prerequisite: completion of courses per degree plan. Corequisite: NSG 622L. (SS)

NSG 622L Acute Care Adult/Gero Practicum III 4(0-12)
Synthesizes the advanced practice nurse's role in patientcentered care of adult and geriatric populations. Corequisite: NSG 622. (S/U grading) (SS)

NSG 631 Family I 2(2-0)
Introduces primary care management for the family across the lifespan. Prerequisite: completion of courses per degree plan. Corequisite: NSG 631L. (F)

## NSG 631L Family Practicum I 2(0-6)

Engages in primary care management for the family across the lifespan. Corequisite: NSG 631. (S/U grading) (F)

## NSG 632 Family II 2(2-0)

Explores primary care management for families across the lifespan with acute health needs. Prerequisite: completion of courses per degree plan. Corequisite: NSG 632L. (S)

NSG 632L Family Practicum II (1-5 VAR)
Explores primary care management for the family across the lifespan. Corequisite: NSG 632. (S/U grading) (S)

NSG 633 Family III 2(2-0)
Explores primary care management for families across the lifespan with chronic health needs. Prerequisite: completion of courses per degree plan. Corequisite: NSG 633L. (SS)

NSG 633L Family Practicum III (1-4 VAR)
Applies primary care management for the family across the lifespan. Corequisite: NSG 633. (S/U grading) (SS)

NSG 634 Family IV 2(2-0)
Explores primary care management for families across the lifespan with emergent health needs and end of life issues. Prerequisite: completion of courses per degree plan. Corequisite: NSG 634L. (SS)

NSG 634L Family Practicum IV (1-4 VAR)
Synthesizes primary care management for the family across the lifespan. Corequisite: NSG 634. (S/U grading) (*)
NSG 635L Family Practicum V (1-10 VAR)
Allows for additional practicum hours, as needed. Prerequisite: NSG 631L, 632L, 633L, 634L. (S/U grading) (SS)

NSG 676 Theoretical Mental Health Models 2(2-0)
Explores theories and conceptual models which frame psychiatric-mental health interventions. Prerequisite: completion of courses per degree plan or by permission. (F)

## NSG 677 Psychopharmacology 2(2-0)

Applies psychopharmacological concepts in the management of psychiatric-mental health patients across the lifespan. Prerequisite: completion of courses per degree plan or by permission. (F)

NSG 678 Psychiatric Assessment \& Evaluation 2(2-0)
Analyzes techniques of assessment and evaluation utilizing standard diagnostic criteria. Prerequisite: completion of courses per degree plan or by permission. (SS)

## NSG 679 Psychiatric Differential Diagnosis 2(2-0)

Focuses on diagnostic reasoning and problem solving for the psychiatric-mental health advanced practice nurse. Prerequisite: completion of courses per degree plan or by permission. (SS)

NSG 681 Psych Mental Health I 2(2-0)
Applies theory and evidenced-based practice to the care of the psychiatric-mental health patient across the lifespan. Prerequisite: completion of courses per degree plan. (F)

## NSG 681L PMH Practicum I 4(0-12)

Explores the advanced practice nurse's role in patientcentered care of psychiatric-mental health patients across the lifespan. Corequisite: NSG 681. (S/U grading) (F)

NSG 682 Psych Mental Health II 4(4-0)
Analyzes the health care management of the psychiatricmental health patient across the lifespan utilizing evidencebased guidelines. Prerequisite: completion of courses per degree plan. (S)

## NSG 682L PMH Practicum II 4(0-12)

Applies the advanced practice nurse's role to patient-centered care of psychiatric-mental health patients across the lifespan. Corequisite: NSG 682. ( $\mathrm{S} / \mathrm{U}$ grading) (S)

NSG 683 Psych Mental Health III 4(4-0)
Analyzes complex health care management of the psychiatricmental health patient across the lifespan utilizing evidencebased guidelines. Prerequisite: completion of courses per degree plan. (S)

## NSG 683L PMH Practicum III 4(0-12)

Synthesizes the advanced practice nurse's role while providing patient-centered care of psychiatric-mental health patients across the lifespan. Corequisite: NSG 683. (S/U grading) (S)

## NSG 901 Vulnerable Population Fellowship 1 6(0-40)

This residency is for the post master's student wishing to develop their skills in primary care with vulnerable populations (600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner. (S/U grading) (*)

NSG 902 Vulnerable Population Fellowship 2 6(0-40) Continuation of NSG 901 for the post master's student wishing to develop their skills in primary care with vulnerable populations ( 600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner; NSG 901. (S/U grading) (*)

NSG 903 Vulnerable Population Fellowship 3 6(0-40) Continuation of NSG 902 for the post master's student wishing to develop their skills in primary care with vulnerable populations ( 600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner; NSG 902. (S/U grading) (*)
NSG 904 Vulnerable Population Fellowship 4 6(0-40)
Advanced training for the post resident student wishing to develop mastery with their skills in primary care with vulnerable populations ( 600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner; NSG 903. (S/U grading) (*)
NSG 905 VuInerable Population Fellowship 5 6(0-40)
Continuation of advanced training for the post resident student wishing to develop their skills in primary care with vulnerable populations ( 600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner; NSG 904. ( $\mathrm{S} / \mathrm{U}$ grading) (*)

NSG 906 Vulnerable Population Fellowship 6 6(0-40) Continuation of advanced training for the post resident student wishing to develop their skills in primary care with vulnerable populations (600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner; NSG 905. (S/U grading) (*)

## PHILOSOPHY (PHIL)

## UNDERGRADUATE COURSES

PHIL 102 Philosophical Literature 3(3-0)
Philosophical literature that focuses on such questions as what is the nature of reality, how do we know what we know, and for what kind of life should we strive. (F,S)
PHIL 120 Islam and Non-Western Religions 3(3-0)
A study of major world religions including Buddhism, Confucianism, Hinduism, Islam, Jainism, Sikhism, Shinto, Taoism, Zoroastrianism. (*)
PHIL 201 Classics in Ethics 3(3-0)
The logic of objective norms and standards of good" vs. bad," right" vs. wrong," from major philosophers and classics of literature. Application to contemporary issues. ( $\mathrm{F}, \mathrm{S}$ )

## PHIL 204 Critical Reasoning 3(3-0)

Survey of the general principles of correct reasoning with emphasis on the role of language in the reasoning process. Major concern with induction and fallacy detection. ( $F, S$ )

PHIL 205 Deductive Logic 3(3-0)
Study of the principles and methods used to distinguish valid from invalid patterns of deductive reasoning. Especially useful for students in computer- or mathematics related fields.(*)

PHIL 280 The Ancients: Person, Polis, Cosmos 3(3-0) Exploration of the ancient origins of Western philosophy with an emphasis on the Presocratics, the Sophists, Socrates, Plato and Aristotle. (*)

PHIL 291 Special Topics (1-3 VAR)
Students who have an area of special interest are encouraged to contact the department. Special topics and authors of philosophical interest. May be repeated for 12 credits maximum.(*) Repeatable (12)
PHIL 295 Independent Study (1-3 VAR)
Specialized study of select persons, ideas, schools, historical trends or problems in philosophy. May be repeated up to 9 credits. Prerequisite: permission of instructor. (*) Repeatable (9)

PHIL 380 The Moderns: Science, Self, State 3(3-0)
Exploration of intellectual revolutions in 16th - early 19th century Europe as represented in thinkers such as Hobbes, Descartes, Locke, Hume, Rousseau, and Kant. (*)

## PHIL 491 Special Topics (1-3 VAR)

Special topics and authors of philosophical interest. May be repeated for 12 credits maximum. More advanced than PHIL 291. Students who have an area of special interest are encouraged to contact the department. (*) Repeatable (12)

PHIL 480 Continental Thought 3(3-0)
European thought of the 19th and 20th centuries including existentialism, critical theory, and postmodernism; discussion of thinkers such as Nietzsche, Heidegger, Sartre, Adorno, and Foucault. (*)

PHIL 485 American Pragmatism and its Legacy 3(3-0)
An examination of pragmatism from its roots in transcendentalism and evolutionary thought to its zenith in Peirce, James, and Dewey, and its contemporary legacy. (*)

PHIL 495 Independent Study (1-3 VAR)
Specialized study of select persons, ideas, schools, historical trends or problems in philosophy. May be repeated up to 9 credits. Prerequisite: permission of instructor. (*) Repeatable (9)

## PHYSICS/PHYSICAL SCIENCE (PHYS) UNDERGRADUATE COURSES

PHYS 110 Astronomy 3(3-0)
Solar system, including motions of the planets, eclipses, and satellite exploration; classification and evolution of stars; clusters, nebulae, galaxies and the expanding universe. (F,S)
PHYS 110L Astronomy Lab 1(0-2)
Laboratory course to accompany PHYS 110. Corequisite: PHYS 110. (F,S)

PHYS 140 Light, Energy, and the Atom 3(3-0)
A non-mathematical approach to light, energy sources, conservation, atoms, nuclei and nuclear radiation. Emphasis on phenomena encountered in everyday life or that affect public policy. (F,S)

PHYS 140L Light, Energy and the Atom Lab 1(0-2)
Optional laboratory to accompany PHYS 140. Experiments in light, solar energy, atomic and nuclear physics with emphasis on qualitative understanding of observations. Corequisite: PHYS 140. (F)
PHYS 150 (CHEM 150) Elementary Concepts in Physics and Chemistry 4(3-2)
Hands-on standards-based approach to understanding basic concepts of physics and chemistry. Integrated lecture, lab and discussion periods. (F,S,SS)
PHYS 201 Principles of Physics I 3(3-0)
Motion, forces, conservation of energy and momentum, wave motion, sound and heat. For engineering technology, life sciences, and other interested students. Prerequisite: College Algebra and satisfactory math placement exam score. Corequisite: PHYS 201L. (F,S)

PHYS 201L Principles of Physics I Lab 1(0-2)
Corequisite: PHYS 201. (F,S)
PHYS 202 Principles of Physics II 3(3-0)
Electrostatics, electromagnetism, light, atomic and nuclear physics. Prerequisite: PHYS 201. (A grade of C or better is required for prerequisite courses.) Corequisite: PHYS 202L. ( $\mathrm{F}, \mathrm{S}$ )

PHYS 202L Principles of Physics II Lab 1(0-2)
Corequisite: PHYS 202. (F,S)
PHYS 221 General Physics I 4(4-0)
Newtonian mechanics, including linear and rotational dynamics, momentum, energy, gravitation, fluid mechanics, wave motion and thermodynamics. Uses the calculus and vector notation. For majors in physics, mathematics, geoscience, engineering and chemistry. Prerequisite: high school physics or PHYS 201, or permission of instructor. (A grade of C or better is required for prerequisite courses.) Prerequisite or corequisite: MATH 126. Corequisite: PHYS 221L. (S)

PHYS 221L General Physics I Lab 1(0-2)
Corequisite: PHYS 221. (S)
PHYS 222 General Physics II 4(4-0)
Electrostatics, electromagnetism, elementary circuits, electrical oscillations, geometrical optics and the wave aspects of light. Prerequisite: PHYS 221. (A grade of C or better is required for prerequisite courses.) Corequisite: PHYS 221 and 222L. (F)

PHYS 222L General Physics II Lab 1(0-2)
Corequisite: PHYS 222. (F)
PHYS 291 Special Topics (1-4 VAR) (*) Repeatable
PHYS 293 Seminar 1(1-0)
The student attends at least 11 Physics Seminar presentations or other approved presentations and then presents a public seminar presentation on some approved physics-related topic. (F,S) Repeatable

PHYS 301 Theoretical Mechanics 4(4-0)
Statics and dynamics of particles and rigid bodies. Conservation principles, minimum principles, accelerated coordinate systems, Lagrangian and Hamiltonian methods, vector and matrix methods. Prerequisite: PHYS 221, MATH 325 and MATH 337. (A grade of C or better is required for prerequisite courses.) ( $\mathrm{F}, \mathrm{E}$ )

PHYS 321 Thermodynamics 3(3-0)
Introduction to thermodynamic laws and principles, entropy, kinetic theory and statistical mechanics. Prerequisite: PHYS 221. (A grade of $C$ or better is required for prerequisite courses.) (F,E)
PHYS 322 Advanced Laboratory- Heat 1(0-2)
Experiments in heat of combustion, heat transfer, thermal electromotive force, viscosity, and specific heat measurements. Prerequisite or corequisite: PHYS 321. (A grade of $C$ or better is required for prerequisite courses.) (F,E)
PHYS 323 General Physics III 4(4-0)
Introduction to special relativity, kinetic theory, quantization, wave mechanics, atomic structure, nuclear physics and spectroscopy. Prerequisite: PHYS 222/222L and MATH 224. (A grade of C or better is required for prerequisite courses.) Corequisite: PHYS 323L. (S)

PHYS 323L General Physics III Lab 1(0-2)
Corequisite: PHYS 323. (S)

PHYS 341 Optics 3(3-0)
Geometrical optics, interference, diffraction, polarization of light, optical properties of materials, optical sources including lasers, and holography. Prerequisite: PHYS 222/222L and MATH 325. (A grade of $C$ or better is required for prerequisite courses.) ( $\mathrm{F}, \mathrm{O}$ )

PHYS 342 Advanced Laboratory-Optics 1(0-2)
Experiments in interference, diffraction, absorption, spectral characteristics and polarization of light. Prerequisite or corequisite: PHYS 341. (A grade of C or better is required for prerequisite courses.) ( $\mathrm{F}, \mathrm{O}$ )

## PHYS 431 Electricity and Magnetism 4(4-0)

Mathematical treatment of electrostatics, currents, magnetism, electromagnetic induction, Maxwell's equations and electrodynamics. Prerequisite: PHYS 222/222L, MATH 325 and 337. (A grade of C or better is required for prerequisite courses.) (S,E)

## PHYS 432 Advanced Laboratory-Electricity and <br> Magnetism 1(0-2)

Experiments in electrostatic constants, magnetic effects, capacitance, thermoelectric effects, magnetic properties, inductance, mutual inductance, and production, propagation and diffraction of microwaves. Prerequisite or Corequisite: PHYS 431. (A grade of C or better is required for prerequisite courses.) (S,E)

PHYS 441 Quantum Mechanics 4(4-0)
Wave packets, operators, the Schroedinger equation, eigenstates, angular momentum, spin, magnetic moments, Heisenberg formulation. Prerequisite: PHYS 323/323L, MATH 325 and 337 . (A grade of C or better is required for prerequisite courses.) ( $\mathrm{S}, \mathrm{O}$ )
PHYS 480 Practicum in Laboratory Instruction 1(0-2)
Participation in laboratory instruction under the guidance of a staff member. Includes instruction on laboratory safety. May be repeated for a maximum of two credits. (F,S) Repeatable (2)

PHYS 491 Special Topics (1-4 VAR) (*) Repeatable
PHYS 492 Research 1(0-2)
Prerequisite: eight credits in upper-division physics courses. (F,S) Repeatable

PHYS 493 Seminar 1(1-0)
Class members report on recently published work or on their own research in physics or applied physics. May be repeated for a maximum of two credits. Prerequisite: advanced standing with a major or minor in physics. ( $\mathrm{S}, \mathrm{O}$ ) Repeatable (2)

## PHYS 495 Independent Study (1-2 VAR)

Prerequisite: junior or senior standing; permission of department chair. (*) Repeatable

PHYS 498 Internship (1-6 VAR)
Work experience using the discipline of physics under the direction of the selected organization and a faculty member. Prerequisite: junior or senior standing and permission of the department chair.(S/U grading) (*) Repeatable

PHYS 499 Thesis Research 1(1-0)
Students write a research paper describing their own research. Prerequisite: senior standing in the department. (F,S) Repeatable

## POLITICAL SCIENCE (POLSC) UNDERGRADUATE COURSES

POLSC 101 American National Politics 3(3-0)
Basic processes in American politics. Principles and structure of national governments. (*)

POLSC 102 State and Local Government and Politics (3-0) Behavioral aspects, government organization and interrelationships of state and local politics, relations with federal government and other states. Special attention to Colorado government. (S)
POLSC 105 (PSYCH, SOC, WS 105) Understanding
Human Diversity 3(3-0)
Americans live in a complex and diverse society. This course examines the nature, impact and strategies for dealing with diversity in personal and social contexts. (*)

POLSC 106 Minority Politics in America 3(3-0)
An overview of the historical and contemporary struggles for empowerment by groups traditionally excluded from full societal participation because of racial designation. (*)
POLSC 200 Understanding Human Conflict 3(3-0)
Study of conflict: personal, social, institutional, ethnic, and international. Conflict resolution and management also will be addressed. (*)

POLSC 201 International Relations 3(3-0)
Introduction to international relations and world politics. Focuses on global political issues, including conflict, war, political economy, environmental politics and globalization. (F)

POLSC 202 Comparative Politics 3(3-0)
Introduction to comparative political analysis through study of selected political systems. Emphasis on basic political functions and processes in developed countries. (S)

POLSC 250 Research Methods in Political Science 3(3-0) Introduction to the basic methods and tools of research in political science, including the scientific method, research design, data collection and qualitative and quantitative analysis. Prerequisite: POLSC 101. (F,S)

POLSC 270 Introduction to Homeland Security 3(3-0)
An overview of homeland security, key threats, challenges and potential responses. (F)

POLSC 271 Terrorism 3(3-0)
An examination of extremist groups and private violence in the context of monitoring, prevention, and responses. (S)

POLSC 272 Critical Incident Management 3(3-0)
The policies and practices of local first responders, interagency relationships, political violence and unconventional weapons. (F)

POLSC 291 Special Topics (1-3 VAR)
Study of political events. (*) Repeatable
POLSC 300 Political Parties and Elections 3(3-0)
Examines the organization and function of political parties and the roles of political parties, pressure groups, and public opinion in American elections. Prerequisite: POLSC 101. (F)

POLSC 305 War, Peace, and Globalization 3(3-0)
Study of war, peace, and globalization in international relations. Special emphasis on the theoretical framework for global conflict and the many political dimensions of globalization. Prerequisite: POLSC 101. (S)

POLSC 321 American Constitutional Development 3(3-0) Political context of the origin of the U.S. Constitution, Supreme Court procedures, court decisions defining uses and scope of the powers of the court, the Congress and the presidency. Prerequisite: POLSC 101. (F)

POLSC 322 American Constitutional Law 3(3-0)
Survey of American constitutional law; emphasis on Supreme Court decisions defining the extent and limits and of governmental authority and the rights and liberties of individual citizens. Prerequisite: POLSC 321 or permission of instructor. (S)

POLSC 323 Criminal Law and Procedure 3(3-0)
Content and characteristics of criminal law and procedures. Roles and functions of persons and agencies involved in judicial administration. Prerequisite: POLSC 101. (F)
POLSC 324 Family Law 3(3-0)
Survey of legal issues concerning domestic relations; Supreme Court decisions and legislative enactments. Prerequisite: POLSC 101 and 320. (S)

POLSC 330 Introduction to Public Administration 3(3-0) Role of public bureaucracy in modern society. Principles and processes of public administration, personnel management and administrative responsibility. Prerequisite: POLSC 101. (*)

POLSC 340 Public Policy 3(3-0)
Introduces the process of formulation, implementation, and evaluation of public policy. Examines program development and execution in the context of political, economic, and institutional environments. Prerequisite: POLSC 101. (*)

## POLSC 370 Western Political Thought 3(3-0)

Systematic survey of political thought from beginnings in Ancient Near East to present. Emphasis on contributions relevant to contemporary political theory. Prerequisite: POLSC 240. (F,S)
POLSC 373 Intelligence and National Security 3(3-0)
Examines inter-agency relations as well as practical and political elements of domestic intelligence gathering. (F)

POLSC 374 Homeland Security and the Law 3(3-0)
Explores the legal and constitutional aspects of homeland security and homeland defense. (S)
POLSC 375 Threat and Strategic Planning 3(3-0)
Topics include the development of threat assessment and planning, public-private sector resource partnering and crisis communication. (S)

POLSC 395 Independent Study (1-3 VAR)
Independent study involving specialized reading and research. Prerequisite: permission of instructor. (*) Repeatable (6)

POLSC 405 The American Presidency 3(3-0)
Analysis of the powers and politics of the American presidency and those who have held the office. Presidential decision making, legislative and judicial relationships, elections. Prerequisite: POLSC 101. (S)
POLSC 411 Legislatures and Legislation 3(3-0)
Organization, function, and process of American legislatures at national, state and local levels. Party organization, legislative procedures, lobbying and legislative reorganization. Prerequisite: POLSC 101. (F)
POLSC 440 Nationalism/Ethnic Conflict 3(3-0)
The course will survey theories of identity formation and study the political origins and consequences of national and ethnic identities in countries around the world. (S/E)

POLSC 445 Inequality and Economic Development 3(3-0) Analyzes politics in developing countries with an emphasis on how politics and political systems affect economic growth and inequality. ( $\mathrm{S}, \mathrm{O}$ )

POLSC 450 Democracy and Dictatorship 3(3-0)
This course analyzes democratic systems from around the world and explores which democratic systems promote good governance and why others promote corruption or poor governance. (F/O)

POLSC 455 States, Citizens and Human Rights 3(3-0) Introduces students to the theories, politics and issues involved in building states, promoting human rights and defining citizenship in modern political systems. (F/E)

## POLSC 473 American Political Thought 3(3-0)

Development of American segment of modern political thought from colonial times to present. Interrelationship of individuals, ideas and institutions shaping modern American political responses. (*)

## POLSC 480 Practicum in Politics and Public Service

## (1-6 VAR)

For advanced students. Practical experience as interns in governmental agencies, political parties or legal offices. Prerequisite: departmental permission. (S/U Grading) (*) Repeatable (6)

## POLSC 491 Special Topics (1-3 VAR)

Independent study involving seminars and research. Prerequisite: junior or senior status with adequate preparation and approval of instructor. (*) Repeatable

POLSC 492 Research (1-3 VAR) (*) Repeatable (6)
POLSC 493 Seminar (1-3 VAR)
Application of research methods and materials. Emphasis on in-depth study of specific political topics. Involves writing and discussion of research papers at advanced level. Prerequisite: POLSC 240 and 370. (S)

## PSYCHOLOGY (PSYCH) <br> UNDERGRADUATE COURSES

PSYCH 100 General Psychology 3(3-0)
Overview of the field of psychology including learning, perception, motivation, emotion, heredity, personality, development, abnormal and psycho-therapy. (F,S,SS)

PSYCH 103 Introductory Psychology for Majors 2(2-0)
Explore psychology as a career in addition to an introduction to the basic skills required for conducting psychological research including APA writing style, journal article analysis, and basic statistics. (F,S,SS/E)

PSYCH 105 (POLSC, SOC, WS 105) Understanding Human Diversity 3(3-0)
Americans live in a complex and diverse society. This course examines the nature, impact and strategies for dealing with diversity in personal and social contexts. (*)
PSYCH 110 Improving Memory 2(2-0)
Practical guide to understanding and improving memory. Emphasis on the application of study techniques for memory improvement. Exercises de-signed to increase memory ability. (*)
PSYCH 151 Human Development 3(3-0)
Survey of human development through life span. A multidisciplinary approach to the study of both change and stability in physical, cognitive, social and personality development Review of relevant developmental theory and research. (F,S,SS)

PSYCH 205 Introduction to Sport Psychology 3(3-0)
An introduction to psychological theories and constructs affecting performance, coaching \& development in sports and athletics. (F)

PSYCH 207 Quantitative Research Methods I 3(3-0)
Introduction to research development and use of quantitative methods. Prerequisite: PSYCH 100, PSYCH 103, Gen Ed Math. Corequisite: PSYCH 207L. (F,S)
PSYCH 207L Quantitative Research Methods Lab I 1(0-1) Introduction to methods of psychological experimentation. Prerequisite: PSYCH 100, PSYCH 103, Gen Ed Math. Corequisite: PSYCH 207. (F,S)

PSYCH 209 Quantitative Research Methods II 3(3-0)
Continuation of PSYCH 207. Focus on research development and quantitative methods. Prerequisite: PSYCH 100, PSYCH 103, PSYCH 207. Corequisite: PSYCH 209L. (F,S)

## PSYCH 209L Quantitative Research Methods Lab II

 1(0-1)Continuation of Quantitative Research Methods Lab I. Prerequisite: PSYCH 100, PSYCH 103, Gen Ed Math, PSYCH 207, PSYCH 207L. Corequisite: PSYCH 209. (F,S)
PSYCH 211 (WS 211) Women and Society 3(3-0)
Statistical overview of the current status of women, followed by examination of theories concerning equality of the sexes. Prerequisite: PSYCH 100. (F)

## PSYCH 212 (WS 212) Sexism and Racism in America

 3(3-0)Dynamics of prejudice and discrimination in terms of sex and race; special attention to analysis of strategies for improving relations. (S)

PSYCH 220 Drugs and Behavior 3(3-0)
Principles of drug action with attention to beneficial and harmful uses of drugs. ( $F, S$ )

PSYCH 222 Understanding Animal Behavior 3(3-0)
Basic comparative and ethological perspectives regarding animal behavior. Scientific techniques for observation of animal behavior may be demonstrated at the Pueblo Zoo. (F,S)

## PSYCH 231 (SOC, WS 231) Marriage and Family

Relationships 3(3-0)
Marriage and family from an institutional and relationship perspective: cross-cultural diversity, mate selection, marital dynamics, parenting, divorce, remarriage, emerging patterns. (F,S)
PSYCH 241 Human Sexuality 3(3-0)
Psychological and biological aspects of human sexual behavior. Prerequisite: PSYCH 100 and sophomore standing. (*)
PSYCH 251 Childhood and Adolescence 3(3-0)
Physical, social, cognitive, and emotional growth of the individual from childhood through adolescence. Topics include intelligence, social development, self development, moral development, family relations. Prerequisite: PSYCH 100. (F,S)

PSYCH 311 Theories of Personality 3(3-0)
Major theories of personality and the methods of personality investigation. Prerequisite: PSYCH 100. (F,S)
PSYCH 314 Environmental \& Conservation Psych 3(3-0) The influence of the physical and social environment on the individual. Variables considered include architecture, city size, noise, pollution and allocation of resources. Prerequisite: PSYCH 100. (*)
PSYCH 315 Industrial/Organizational Psychology 3(3-0) Application of the principles of psychology to the workplace, including personnel selection, motivation, group processes, leadership, job analysis, and organization. Prerequisite: PSYCH 100. (*)

PSYCH 331 Physiological Psychology 3(3-0)
Structure and function of the brain, nervous and endocrine systems; biological basis of sensation, perception, sleep and arousal, motivation, learning and memory, and drug action. Prerequisite: PSYCH 100. Corequisite: PSYCH 331L. (S)

PSYCH 331L Physiological Psychology Lab 1(0-2) Corequisite: PSYCH 331. (S)

## PSYCH 334 Perception 3(3-0)

The senses and how they cooperate with the brain to provide awareness and knowledge of the world about us. Empirical findings and theoretical analysis of the processes of seeing, hearing, tasting, smelling and touching. Role of learning in normal and illusory perception is considered. Prerequisite: PSYCH 100 or permission of instructor. Corequisite: PSYCH 334L. (*)

PSYCH 334L Perception Lab 1(0-2)
Corequisite: PSYCH 334. (*)
PSYCH 336 Learning and Motivation 3(3-0)
Principles of learning and memory. Empirical findings and theoretical analyses of topics including conditioning, reinforcement and punishment. Research and application. Prerequisite: PSYCH 100 or permission of instructor. (*)

PSYCH 337 Memory and Cognition 3(3-0)
Theory and research on current topics in cognition, including attention, concept formation, imagery, memory, decision making, language acquisition, problem solving and text comprehension. Prerequisite: PSYCH 100. (F)

PSYCH 342 Educational Psychology 3(3-0)
The contribution of psychology theory, research and methods to our understanding of teaching and learning. Prerequisite: PSYCH 100 or 151. (*)

## PSYCH 351 Psychology of the Exceptional Individual 3(3-0)

Survey of characteristics of those individuals considered significantly above or below the norm of the population. Emphasis on behavioral identification and modification of the home, school and social environment. Prerequisite: PSYCH 100. (*)

PSYCH 352 (SOC 352) Social Psychology 3(3-0)
General and applied psychological principles of the individual's interaction with a group. Prerequisite: PSYCH 100. (*)

PSYCH 353 Advanced Developmental Psychology 3(3-0) Emphasis on theoretical foundations of developmental psychology. Research strategies used in conducting developmental research. Prerequisite: PSYCH 151 or PSYCH 251. (F,S)

PSYCH 362 Abnormal Psychology 3(3-0)
Etiology, diagnosis and therapy of maladaptive or abnormal behaviors and mental functioning. Prerequisite: PSYCH 100. ( $\mathrm{F}, \mathrm{S}$ )
PSYCH 381 Principles of Psychological Testing I 3(3-0)
Theories and principles of psychological testing are applied to the selection, use and evaluation of available tests. Prerequisite: PSYCH 100, 209, and 209L. (*)
PSYCH 401 History and Systems of Psychology 3(3-0)
The historical development of modern psychology from its roots in classical philosophy and the social, cultural, and political context within which psychological theory emerged. Prerequisite: PSYCH 100, 209, 209L and senior standing. ( $\mathrm{F}, \mathrm{S}$ )

PSYCH 410 Advanced Data Analysis 3(3-0)
Advanced techniques in data analysis, including analysis of variance/covariance, post-hoc tests, multiple regression and non-parametric tests. Use of computer software programs will be addressed, especially for those interested in graduate school admission. Prerequisite: PSYCH 209 and 209L. (*)

## PSYCH 417 Health Psychology 3(3-0)

Students will study how the biopsychosocial model interacts dynamically and influences the well being of the whole person. Prerequisite: PSYCH 100. (*)

PSYCH 420 Human Evolutionary Psychology 3(3-0)
A synthesis of the modern principles of psychology with evolutionary biology with an emphasis on the origins of higher cognitive functions, emotions, and culture. Prerequisite: PSYCH 100 \& Jr. Sr. standing. (*)
PSYCH 463 Psychopathology of Childhood 3(3-0)
A survey of the unique conceptual models of etiology, assessment and therapy appropriate to the study of the psychological disorders of childhood. Prerequisite: PSYCH 100 and 362 or equivalent. (*)

## PSYCH 464 Systems of Counseling and Psycho-therapy

 3(3-0)Traditional and contemporary theories of counseling and psychotherapy through use of case studies and other selected materials. Prerequisite: PSYCH 100, 311, and 362. Corequisite: PSYCH 464L or permission of instructor. (F)
PSYCH 464L Systems of Counseling and Psycho-therapy Lab 1(0-2)
Corequisite: PSYCH 464. (F)
PSYCH 465 Behavior Modification 3(3-0)
Advanced methods and techniques of behavior modification as practiced in various agencies and institutions. Prerequisite: PSYCH 100 and upper division standing. (*)
PSYCH 471 Clinical Psychology 3(3-0)
Survey of clinical psychology as a profession. Training requirements, opportunities, future directions, current research and ethical problems. Prerequisite: PSYCH 100, 311, 362, and upper division standing. (F)

PSYCH 475 Group Process 3(3-0)
Study and practice of basic group theory and approaches as they are applied in mental health. Basic group therapeutic techniques and procedures will be demonstrated in an experiential setting. Prerequisite: PSYCH 100, 311, 362, 464, and 464L. (S)

## PSYCH 491 Special Topics (1-3 VAR)

Prerequisite: permission of instructor. (*) Repeatable
PSYCH 492 Research (1-3 VAR)
Faculty directed research project for undergraduate student. May be repeated for a maximum of 3 total credits. Prerequisite: junior or senior level standing. approval of Department Chair. (F,S,SS) Repeatable (3)
PSYCH 494 Field Experience (1-12 VAR)
In-depth, on-the-job experience in psychology, individually designed. Ability to use psychological tests and counseling techniques recommended. Prerequisite: PSYCH 100, 311, 362, 464, 464L, upper division standing, and written permission of instructor. (F,S,SS) Repeatable (12)

PSYCH 495 Independent Study (1-3 VAR)
Prerequisite: PSYCH 100, upper division standing, and written permission of instructor. (F,S,SS) Repeatable (3)

## GRADUATE COURSES

## PSYCH 515 Psychology of Minorities 3(3-0)

Designed to provide a systematic analysis of the forces that shape the behavior of minorities and consequent counseling methods with this population. (*)
PSYCH 517 Life Span Development 3(3-0)
Leads to a broad understanding of the impact of external influences on a person through the life span. Format includes exploration of topics of interest, discussion of research and active class participation (*)

## PSYCH 524 Philosophy and Theories of Counseling

 3(3-0)Designed to acquaint students with the range of theories currently directing the work of the counselor and to facilitate the development of a personal model of counseling. Personal professional ethics emerge as a major course focus. (*)

PSYCH 525 Tools and Techniques of Guidance Services 3(3-0)
Open to graduate students in the secondary school counseling program. A study of materials and methods used in secondary schools and of the counselor as a consultant and coordinator. The importance and role of the secondary school counselor will be the focus of this class. (*)

PSYCH 526 Organizational Development 3(3-0)
Designed to provide the graduate student with experience and skills necessary to improve programs and organization. (*)

PSYCH 527 Group Counseling 3(3-0)
Leads to an understanding of the function of group methods in the guidance program and assists the student in developing group facilitation skills. (*)

## PSYCH 528 Career Development 3(3-0)

Designed to help students gain insight and understanding of the development process of occupational decision. Explores career counseling provided by counselors for clients in the areas of future education and in the world of work. (*)

PSYCH 530 Family Therapy 3(3-0)
This course is an introduction to Family Systems Theory. Emphasis is on the history and development of treatment models in family interventions and techniques. Prerequisite: graduate standing. (*)
PSYCH 536 Practicum 3(3-0)
Designed to provide the beginning counseling student with basic interpersonal training experience. Individual and group contact focuses on personal growth and skill development. (*)

PSYCH 538 Elementary Counseling 3(3-0)
Designed to provide methods and techniques for elementary school counselors. (*)

PSYCH 546 Assessment in Counseling 3(3-0)
This course provides students with an understanding of group and individual educational and psychometric theories and approaches to appraisal. Prerequisite: graduate standing. (*)
PSYCH 563 Psychopathology of Childhood 3(3-0)
Unique conceptual models of etiology, assessment, and therapy appropriate to psychological disorders of child-hood. Graduate students complete an independent project and consider treatment and management techniques. Prerequisite: graduate standing, permission of instructor and PSYCH 362 or equivalent. (*)
PSYCH 591 Special Topics (1-3 VAR)
Prerequisite: graduate standing and permission of instructor. (*)

## PSYCH 592 Research 3(3-0)

Designed to assist students with the knowledge and skills necessary for a consumer of research. The fundamentals of research procedure and analysis of statistics are stressed. (*)
PSYCH 595 Independent Study (1-3 VAR)
Prerequisite: graduate standing \& permission of instructor. (*)
PSYCH 598 Internship 3(0-3)
Designed to provide the student with actual field work experience in counseling and guidance. (*)

## READING (RDG)

## UNDERGRADUATE COURSES

RDG 099 Development Reading Skills 3(3-0)
Students will apply strategies for improving comprehension, developing vocabulary, and increasing rate for reading college textbooks. (S/U grading) (F,S)

## RDG 310 Current Approaches to Reading and Writing

 Instruction 3(3-0)Various approaches to teaching reading and writing including research findings and classroom application of the reading and writing process. Prerequisite: RDG 410 or 435. (F)

RDG 360 Practicum (1-3 VAR)
Work with small groups and individual pupils in the public school preparing materials and lessons under the supervision of a reading teacher. Applies to both elementary and secondary schools depending upon the instructor's assignment. Prerequisite: RDG 410 or 435 . (F,S)
RDG 410 Teaching Reading 3(3-0)
Includes reading instruction, emphasizing methods and assessment strategies to meet K-6 Colorado content standards; 30 hours of field experience. Prerequisite: admission to Education. (F,S)

RDG 411 Teaching Elementary Language Arts 2(2-0)
Focuses on language arts instruction for K-6 students; 30 hrs . field work required. Prerequisite: admission to Education. ( $\mathrm{F}, \mathrm{S}$ )
RDG 431 Developing Creative Centers 1(1-0)
Involves planning, developing and implementing the use of learning centers in the classroom. Prerequisite: RDG 410 or 435. (SS)

## RDG 435 Content Area Literacy 4(3-2)

Focuses on skills and strategies to improve comprehension of textual material as well as writing in various content areas; 60 hours of field experience. Prerequisite: admission to Education. (F,S)

## RDG 436 New Directions in Reading Comprehension

2(2-0)
Exploration of and simulations of research-based strategies to increase students' comprehension of reading in elementary and secondary classes. Prerequisite: RDG 410 or 435 . (F,SS)
RDG 437 Newspapers as a Teaching Resource 1(1-0)
Strategies and procedures for using the newspaper as a supplementary resource in content area classrooms at all grade levels (K-12). (SS)
RDG 442 Reading Across Cultures 2(2-0)
Techniques of adapting reading instruction for the linguistically and culturally different child. Problems of many minority groups are analyzed. Prerequisite: RDG 410 or 435. (S)

## RDG 450 Diagnosis and Remediation of Reading <br> \section*{Problems 3(2-3)}

Diagnostic and evaluation procedures used in detecting and remediating problems and individualized instruction. Appropriate for elementary and secondary teachers. Field experience required. admission to teacher program required. Prerequisite: a reading instruction course. (F,S)
RDG 491 Special Topics (1-2 VAR) (*)
RDG 495 Independent Study (1-2 VAR)
Individual projects and problem-solving experiences designed to meet students' special needs. With instructor's permission, certain program requirements may be completed through independent study. (*)

## GRADUATE COURSES

RDG 510 Foundations of Reading Instruction 3(3-0)
Basic course for other graduate reading courses, including reading skills, sequence, materials, psychology of reading and relationship to other language arts. Prerequisite: graduate standing. (*)

RDG 511 Teaching Elementary Language Arts 2(2-0)
Focuses on language arts instruction for K-6 students; 30 hrs.
field work required. Prerequisite: admission to Education. ( $\mathrm{F}, \mathrm{S}$ )

## RDG 531 Developing Creative Centers 1(1-0)

Students will investigate various types of learning centers and means of successful implementation in the classroom. Development of materials, lesson plans and record-keeping systems which will result in a complete reading center. Investigation into research on effectiveness of learning centers. Prerequisite: graduate standing. (SS)

RDG 535 Content Area Literacy 3(3-0)
Focuses on skills and strategies to improve comprehension of textual material as well as writing in various content areas. Prerequisite: graduate standing. (*)

## RDG 536 New Directions in Reading Comprehension 2(2-0)

Current research-based theory and practical classroom strategies and procedures for increasing comprehension of reading in elementary and secondary content area. Emphasis on open-ended, higher-order thinking skills. Prerequisite: graduate standing. (*)

RDG 537 Newspapers as a Teaching Resource 1(1-0)
Strategies and procedures for using the newspaper as a supplementary resource in content area classrooms at all grade levels (K-12). Prerequisite: graduate standing. (SS)

RDG 542 Reading Across Cultures 2(2-0)
Techniques of adapting reading instruction for the linguistically and culturally different child. Prerequisite: graduate standing. (*)
RDG 550 Diagnosis and Remediation of Reading Problems 3(2-3)
Formal and informal diagnostic procedures for the classroom teacher including standardized testing, informal inventories, close, criterion-referenced testing and Reading Miscue Inventory. Prescriptions based on diagnosis; remediation strategies applied by students. Prerequisite: a beginning reading course, graduate standing, and teacher certification or initial testing in basic competencies. (*)

RDG 552 Psycholinguistic Views of Reading: Process to Practice 2(1-3)
Introduction to psycholinguistic perspectives through analysis of oral reading errors. Reading Miscue Manual as an instrument for investigating reader's strengths and weaknesses. Strategies for remediating poor quality miscues. Prerequisite: beginning course in reading, graduate standing, and teacher certification or initial testing in basic competencies. (*)

RDG 560 Practicum 2(0-6)
Work with small groups and individual pupils in the public school preparing materials and lessons under the supervision of a reading teacher. Applied to both elementary and secondary schools depending on the instructor's assignment. Prerequisite: RDG 410 or 435 , and graduate standing. (*)

RDG 591 Special Topics (1-2 VAR)
Prerequisite: graduate standing. (*)
RDG 595 Independent Study 1(0-2)
Prerequisite: graduate standing. (*)

## RECREATION (REC)

## UNDERGRADUATE COURSES

REC 100L Wilderness Technical Skills 1(0-2)
Introduction to wilderness skills paramount for outdoor leadership competence. Students will learn and demonstrate technical skills. (F)

REC 102 Mountain Orientation 2(1-2)
An intensive one-week field experience in the Colorado mountains. Clothing and equipment selection, nutrition and rations planning, back country conservation and sanitation, navigation, and trail techniques. (*)

## REC 103 Winter Orientation 2(1-2)

An intensive one-week ski tour experience in the Colorado mountains. Group dynamics, leadership, and expedition behavior. Travels hut to hut with some winter camping. Prerequisite: permission of the instructor. (*)

REC 104 Desert Orientation 2(1-2)
An intensive one-week desert camping and backpacking experience, accompanied by nine lectures in preparation for the trip. Natural and cultural history, desert conservation, group dynamics. (*)

## REC 105 Canyon Orientation 2(1-2)

Students will develop proficiency in canyon travel, group camping, and will explore the geology, geography, and ecology of the canyon country. (*)

## REC 112L Rock Climbing 1(0-2)

An introduction to the basic understanding of rock climbing, equipment, Leave No Trace environmental ethics and rock climbing as an outdoor recreational activity. (S)

REC 113L Whitewater Boating 1(0-2)
Introduction class in which the following skills are taught: basic strokes, Eskimo rolling, how to read water, and clothing requirements. The class will include lecture, pool and river trip sessions. (*)

REC 114L Basic Mountaineering Techniques 1(0-2)
Students will learn necessary information and techniques including clothing, equipment, physical conditioning, stewardship, access, knot tying, and will participate in an incline climb. Prerequisite: REC 100L. (F)

REC 116L Camping 1(0-2)
A basic camping class designed to teach the fundamentals of self-sufficient tent camping. Emphasizes clothing, equipment selection, nutrition, and Leave No Trace guidelines. (*)

REC 117L Backpacking 1(0-2)
An introduction course to instruct the basics of traveling in the backcountry with everything one needs in their backpack. Clothing, equipment, orienteering, first aid, route and campsite selection will be emphasized during the trips that are required for this class. (F)

REC 240 Recreation Program Design 3(3-0)
Rationale supporting and methods of conducting recreation programs in a wide variety of public, private, voluntary and commercial recreation agencies. (F)
REC 249 Challenge Course Leadership 2(2-0)
This course is designed to teach knowledge, skills, and methods necessary to facilitate challenge course programs in a variety of settings for specific client groups. (F,S)

REC 250 Commercial Recreation and Tourism 3(3-0)
Designing for-profit recreation programs and facilities that are linked to tourism. Practical approach to programming in a commercial setting. (F)

REC 270 Outdoor Leadership I 2(1-2)
An introduction to the concepts of outdoor leadership including a field experience focused on the application of theoretical and practical concepts. Additional costs apply. Prerequisite: REC 100L, REC 102. (F)

REC 280 Foundations of Therapeutic Recreation 3(3-0) Prescribed recreational activities as clinical treatment modality for impaired clients. Services for developmentally delayed, law offenders, psychologically impaired, sensory impaired, physically disabled, disadvantaged or aging. (F)

REC 291 Special Topics (1-5 VAR)
Undergraduate level of study designed to increase understanding in areas not covered by the department. (*) Repeatable
REC 322 Wilderness First Aid 2(2-0)
Course teaches theory, knowledge, and skills needed for basic medical treatment and evacuation in the wilderness. Involves 3 days of medical training, scenarios and testing. ( $\mathrm{S} / \mathrm{U}$ grading) ( F )

REC 350 Leadership and Ethics 3(3-0)
Addresses leadership techniques and styles, leadership theory, group dynamics, and ethical considerations in recreation. Prerequisite: EXHP 101, junior or senior level standing or permission of instructor. (S)

REC 360 Outdoor Education 3(3-0)
Concepts and methods of outdoor education and interpretation. Students learn to teach outdoor living skills and natural history using experiential methods in an outdoor setting. Prerequisite: EXHP 101, junior or senior level standing or permission of instructor. (F)

## REC 370 Outdoor Leadership II 2(1-2)

A practical application of the concepts and theory introduced in REC 270. Students will be required to plan and lead REC 104. Prerequisite: REC 104, REC 240, and REC 270. (S)

REC 375 Research and Evaluation of Recreation 3(3-0)
Provides an overview of research designs and methodologies using recreation participation data, for needs assessment and program evaluation. Prerequisite: MATH 109 equivalent or higher, EXHP 101 or permission of instructor. (F)

REC 381 Environmental Interpretation 3(3-0)
History, philosophy, and techniques of interpreting our natural and cultural heritage to visitors in natural resource-based parks. Addresses public, private, and non-profit agencies. (*)

## REC 388 Outdoor Leadership Practicum (1-3 VAR)

Involves selected practical experiential opportunities in outdoor leadership. Minimum of 50 contact hours per credit hour. Prerequisite: REC 270, REC 370, and permission of instructor. (F,S,SS) Repeatable (3)

REC 389 Community/Commercial Rec Practicum 3(0-3) Minimum of 150 hours of practical experience in a selected recreation agency. Prerequisite: permission of director of recreation program. Prerequisite: REC 280 and REC 360. (F,S,SS)
REC 483 Sustainable Practices 3(3-0)
Sustainable, long-term strategies for ecological survival and environmental stabilization, discussed from the perspectives of ethics, economics and political processes. Includes community research and service projects. Prerequisite: BIOL 121/121L (*)

REC 484 Outdoor Resources and Management 3(3-0)
Examination of the outdoor recreation experience, the organization of resource-based recreation management and key outdoor recreation policy issues. Prerequisite: EXHP 101, junior or senior standing or permission of instructor. (S)

REC 485 Recreation Facility Design/Management 3(3-0)
Presentation of basic elements of design and management of recreational facilities, taking into account the interaction between natural resources and man-made structures. Prerequisite: EXHP 101, junior or senior level standing or permission of instructor. (*)

REC 489 Internship in Therapeutic Rec 12(0-36)
Supervised experience with approved professionals in select therapeutic recreation settings. Assumes the normal responsibilities as an entry-level professional in therapeutic recreation. Prerequisite: senior standing, completion of all degree requirements, 2.5 GPA in major, and permission of instructor. (F,S,SS)

REC 491 Special Topics (1-5 VAR) (*) Repeatable
REC 493 Seminar 2(2-0)
Advanced in-depth examinations of contemporary issues in leisure/recreation. Includes student-led discussions, in-depth term projects and comprehensive examinations. Interview and resumé preparation are emphasized. Prerequisite: REC 389. (S)

## REC 494 Field Experience (1-4 VAR)

Learning experience to be conducted in an actual recreation environment facilitated by an on-site supervisor and an EXHPR supervisor. Prerequisite: approval of the department chair. (S/U grading) (*) Repeatable

REC 495 Independent Study (1-5 VAR) (*) Repeatable
REC 498 Internship (1-12 VAR)
Supervised experience with approved professionals in select recreation settings. Prerequisite: senior standing, completion of all other degree requirements, 2.500 GPA in the major, and departmental chair approval. (F,S,SS)

## GRADUATE COURSES

## REC 550 Leadership and Ethics 3(3-0)

Advanced study of leadership techniques and styles, leadership theory, group dynamics, and ethical considerations in recreation. Prerequisite: graduate standing or permission of instructor. (S)
REC 560 Outdoor Education 3(3-0)
Advanced study of the concepts and methods of outdoor education and ethics. Students will assess outdoor living skills and ecological concepts using experiential methods. Prerequisite: graduate standing or instructor permission. (F)

REC 569 Outdoor Leadership I 2(1-2)
Concepts of outdoor leadership including field experience focused on the application of theoretical and practical ideas and research. (F)
REC 570 Outdoor Leadership II 2(1-2)
Advanced practicum in outdoor leadership. Includes responsibilities in trip planning, management, evaluation, group facilitation and processing, and natural resource agency relations. Prerequisite: REC 569 and graduate standing or permission from the instructor. (S)

REC 584 Outdoor Resources and Management 3(3-0)
Advanced study of the outdoor recreation experience, the organization of resource-based recreation management and key outdoor recreation policy issues. Prerequisite: graduate standing or permission of instructor. (S)

REC 591 Special Topics (1-5 VAR)
Graduate level of study designed to increase understanding in areas not covered by the department. (*) Repeatable

## REC 594 Field Experience (1-6 VAR)

Graduate level field experience project completed in coordination with a faculty member. Prerequisite: faculty permission. (F,S,SS) Repeatable (6)

REC 595 Independent Study (1-6 VAR)
Graduate level independent study completed in coordination with a faculty member. Prerequisite: faculty permission. (F,S,SS) Repeatable

## RUSSIAN (RUS)

## UNDERGRADUATE COURSES

RUS 101 Introduction to Russian I 3(3-0)
Pronunciation, conversation, grammar, alphabet, easy reading and writing. (F)

RUS 102 Beginning Spoken Russian II 3(3-0)
Students are placed by the department. Practice in oral, aural, reading and writing experiences. ( $\mathrm{F}, \mathrm{S}$ )

RUS 201 Intermediate Russian I 5(5-0)
Grammar and vocabulary. Reading of short stories, oral and written reports. Prerequisite: RUS 102 or equivalent. (*)

RUS 202 Intermediate Russian II 5(5-0)
Prerequisite: RUS 201 or equivalent. (*)
RUS 211 Russian Conversation 2(2-0)
Intensive practice. Prerequisite: RUS 102 or equivalent. (*)
RUS 303 Conv and Comp: Russian 3(3-0)
Focus on improving linguistic proficiency within the context of Russian culture. Prerequisite: RUS 202 or equivalent. (*)
RUS 311 Advanced Russian Conversation 2(2-0)
Intensive practice. Prerequisite: RUS 211 or permission of instructor. (*)

RUS 341 Russian Short Story 2(2-0)
Selected short stories. Discussion of ideas, art and authors. Stress on both oral and written work. Prerequisite: RUS 202 or permission of instructor. (*)

## SCIENCE (SCI) <br> GRADUATE COURSE

SCI 500 Workshop (1-4 VAR)
Science workshops designed specifically for professional development of science teachers. Workshops are subtitled and no subtitle may be repeated for credit (not for MSANS credit). Prerequisite: graduate standing or permission of instructor. (*) Repeatable

## SOCIOLOGY (SOC)

## UNDERGRADUATE COURSES

SOC 101 Introduction to Sociology 3(3-0)
The scientific study of patterns and processes of human social relations. (*)

SOC 105 (POLSC, PSYCH, WS 105) Understanding
Human Diversity 3(3-0)
Americans live in a complex and diverse society. This course examines the nature, impact and strategies for dealing with diversity in personal and social contexts. (*)

SOC 155 Minority and Ethnic Relations 3(3-0)
Sociological theories, studies, and findings concerning group maintenance and interaction in contemporary society. (*)

SOC 201 Social Problems 3(3-0)
Sociological perspectives applied to an understanding of global and domestic social problem, including the environment, corporate control, economic and political inequalities, health care, and crime. (*)

SOC 203 The Criminal Justice System 3(3-0)
This course examines origin, nature, and utilization of criminal law; policing, court adjudication and sentencing; jails and prisons; community based corrections; criminal justice policy. (*)

SOC 206 (WS 206) Gender and Society 3(3-0)
Examination and evolution of relationships between sex roles, culture, and societal institutions and processes. Includes an analysis of sexual stratification. (*)

## SOC 212 (ANTHR 212) The Forensics of Bones 3(3-0)

Familiarize students with the basic procedures used by forensic anthropologists to obtain evidence in criminal investigations. (*)

## SOC 231 (PSYCH, WS 231) Marriage and Family

## Relationships 3(3-0)

Marriage and family from an institutional and relationship perspective; cross-cultural diversity, mate selection, marital dynamics, parenting, divorce, remarriage, emerging patterns. (*)

SOC 250 (ANTHR 250) The Sacred in Culture 3(3-0)
Concepts of the supernatural studied cross-culturally and in particular cultures. Consideration of how religion helps individuals adjust to stress and aging. (*)
SOC 252 (ANTHR 252) Culture and Personality 3(3-0) Relationship between group processes and personality factors in a cross-cultural perspective. (*)

SOC 291 Special Topics (1-3 VAR) (*) Repeatable
SOC 301 Sociological Methods 3(3-0)
The methods of research and investigation in sociology and the social sciences. Prerequisite: SOC 101. (F, S)

## SOC 302 Collective Behavior and Social Movements

 3(3-0)An analysis of elementary forms of spontaneous and unstructured behavior (panics, rumors), and complex forms of more structured group phenomena (riots, social movements.) Prerequisite: SOC 101. (S)

SOC 303 Crime and Deviance 3(3-0)
The nature and causes of crime as well as of behavior defined as socially deviant, including violent, corporate, political crimes; sexual, cultural, political deviance. Prerequisite: SOC 101 and 203. (F)

SOC 304 Race and Crime 3(3-0)
Explores historical and contemporary intersecting issues of race and crime in the United States. Theoretical grounding and factual information provide the foundation for the course. Prerequisite: SOC 101 or SOC 155. (*)

SOC 305 (WS 305) Crime and Women 3(3-0)
Exploration of social, cultural and political variables that create both women victims and women criminals. (*)
SOC 306 Delinquency and Juvenile Justice 3(3-0)
Theory and history of delinquency; relationship to family, peer groups, schools, gangs, drugs, young offenders legislation, juvenile courts and police response, youth corrections. (*)

## SOC 308 Popular Culture 3(3-0)

Advertising, television, music, novels, and the news are among the topics to be investigated for their social significance. (*)

SOC 310 (ANTHR 310) Social and Cultural Theory 3(3-0) Examine from classical to contemporary theory in sociology and anthropology. (*)

SOC 352 (PSYCH 352) Social Psychology 3(3-0)
General and applied psychological principles of the individual's interaction with a group. Prerequisite: PSYCH 100 or permission of instructor. (*)

## SOC 353 Penology 3(3-0)

The history and role of corrections; correctional practice, relationship to law, prison society, working in prisons, special needs of prisoners, capital punishment, administration, privatization. Prerequisite: SOC 101 and 203. (*)
SOC 354 Urban Sociology 3(3-0)
Development of urban places; analysis of socio-economic organization, urban social forces and the consequences for individuals, groups and social institutions. (*)
SOC 355 Political Sociology 3(3-0)
Analysis of the major sociological variables associated with political decision making and other political processes. (*)

SOC 356 Social Stratification 3(3-0)
Inquire into inequalities of wealth, power, and the consequence for individuals and society. Prerequisite: SOC 101 and 310. (*)

SOC 358 Film and Society 3(3-0)
An in-depth look at the images of social life and social relationships contained in popular movies. (*)

SOC 359 Community Corrections 3(3-0)
The development and practice of probation, parole, diversion, statutory release, electronic monitoring, halfway houses, privatization. (*)

SOC 401 (ANTHR 401) Health, Culture and Society 3(3-0) Analysis of how social, cultural, and psychological factors influence health and health care. (*)

SOC 402 (ANTHR 402) Aging, Culture and Society 3(3-0) Cultural, sociological and psychological dimensions of aging. (*)

SOC 403 (WS 403) Human Sexuality and Social Behavior (3-0)
Sexuality and sexual conduct from a sociological and social psychological perspective. Prerequisite: junior or senior standing. (*)

SOC 404 Poverty 3(3-0)
Poverty in the United States, its measurement and extent, perpetuating conditions, lifestyle and anti-poverty programs. (*)

SOC 405 Law and Society 3(3-0)
The origins and functions of law; the social organization of legal institutions and decisions; the relationship of law to morality, justice and social change. (*)

SOC 407 (WS 407) Family Violence 3(3-0)
The extent, seriousness, and impact of the major forms of domestic violence. (*)

SOC 408 Science, Technology, and the Future 3(3-0)
Social and structural implications of science and technology as they affect society. (*)

## SOC 409 Victimology 3(3-0)

Study of the victims' role in criminal transactions. Examination off individuals and groups as victims of officially defined crime, as well as other social injuries, not officially defined as crime. (*)
SOC 410 Structural and Elite Crime 3(3-0)
Examination of crimes and social injuries perpetrated by organizational structures that do physical or economic harm to the environment, their employees, and their customers. (*)
SOC 411 Police and Society 3(3-0)
The history and role of police; including patrol officers, detectives, specialty units, police discretion, women in policing, community policing, private policing, corruption, brutality, accountability. Prerequisite: SOC 101. (*)
SOC 413 Patterns of Homicide 3(3-0)
Examines the rates, types, patterns, and explanation of homicide in the United States and selected other countries. Prerequisite: SOC 101 and 203. (*)

## SOC 414 Serial Murder 3(3-0)

Examines serial murder in historical and contemporary contexts and assesses current control strategies including forensic science and profiling. Prerequisite: SOC 101 and 203. (*)

SOC 415 Forensic Criminology 3(3-0)
Course introduces students to variable aspects of Medicolegal Death Investigation. Students will learn about investigating deaths caused by homicide, suicide, accidents, and natural causes. (*)

SOC 416 (ANTHR 416), Crime and the Mind 3(3-0)
Examination of crime" as an ongoing aspect of human existence. (*)

## SOC 417 Forensics \& Homicide Investigations 3(3-0)

Examines police investigations of homicide and presents a critical analysis of the role of forensic science in the identification of suspects. Prerequisite: SOC 101 and 203. (*)

SOC 418 Crime, Drugs and Social Policy 3(3-0)
This course examines the way in which crime and drug policy is formulated, articulated, implemented, and evaluated. (*)

SOC 419 Vice Crime 3(3-0)
This course examines the causes, consequences, and control of vice crimes such as drugs, gambling, and prostitution. (*)

SOC 420 Explaining Crime 3(3-0)
Examination of major sociological explanations of crime and their policy implications. Prerequisite: SOC 101 and 203. (S)
SOC 421 Homicide, Courts \& Corrections 3(3-0)
Examines criminal law applicable to homicide, the court processing of homicide cases, and the sanctions of life imprisonment and the death penalty. Prerequisite: SOC 101 and 203. (*)

## SOC 422 Terrorism and Mass Murder 3(3-0)

Examines mass murder, genocide, and terrorism around the world and assesses current control initiatives. Prerequisite: SOC 101 and 203. (*)

## SOC 424 Organized Crime 3(3-0)

This course examines how organized crime is defined and structured, its causes, its historical roots, its different manifestations and control efforts, both domestically and internationally. Prerequisite: SOC 101 and SOC 203. (*)
SOC 426 Violence and Rioting 3(3-0)
An overview of episodes of collective behavior in society focusing on racial violence and prison riots, including examination of causes, history, and control efforts. Prerequisite: SOC 101 and SOC 203. (SS)

## SOC 428 (HIST, WS 428) Women \& Work 3(3-0)

Examines historical and contemporary issues for women of various economic, social, and ethnic groups, especially in the US; examines gender ideologies about paid, unpaid work. Prerequisite: junior or senior standing or permission of instructor. (*)

SOC 431 Working in Modern America 3(3-0)
Exploration of the changing patterns, structure, and attitudes toward work in the United States today. (*)
SOC 432 Organization Theory 3(3-0)
Prevailing theoretical model of large organizations and suggested alternatives. (*)

SOC 440 Correctional Administration 3(3-0)
Major issues in correctional administration including the history and theories of corrections in the U.S. are analyzed. Prerequisite: Sociology Major. (*)
SOC 448 Emotions in American Culture 3(3-0)
How American norms and values govern the creation, expression, and form of emotions. The content and form of the emotional self. Prerequisite: SOC 101. (*)
SOC 450 Soc of Mental Health and Suicide 3(3-0)
Examines the social conditions that influence mental health and suicide in the United States and the psychosocial processes that link social experiences to psychological health. Prerequisite: SOC 101. (*)
SOC 451 (ANTHR 451) Culture/Deviance/Psychopathology 3(3-0)
Analysis of the relationship between culture and the causes and manifestations of deviance and psychopathology. (*)

SOC 452 (ANTHR 452) Self and Society 3(3-0)
Examination of the self and society within sociological/anthropological theory. Special emphasis will be placed on symbolic interactionism and cross-cultural approaches. Prerequisite: SOC 101 and/or SOC/PSYCH 352 (*)

SOC 453 (WS 453) The Sociology of the Body 3(3-0)
Exploration of what it is like to live through (in/with/as) our female and male bodies. Examination of writings in the field of body studies. Prerequisite: SOC 101. (S)

SOC 455 (WS 455) Hate Crimes 3(3-0)
Examines assumptions about race, gender, sexuality, and others that are used to justify hate crimes; examines common forms, emphasizing causal factors and effects. Prerequisite: SOC 101. (*)

SOC 490 Special Projects (1-3 VAR)
Projects identified by each faculty member in concert with his/her interests. Prerequisite: Sociology major, junior/senior. (*) Repeatable
SOC 491 Special Topics (1-3 VAR) (*) Repeatable
SOC 492 (ANTHR 492) Research 3(3-0)
Qualitative and quantitative methods and designs in sociological research. (*)

SOC 493 Seminar (2-4 VAR) (*) Repeatable
SOC 494 Field Experience (1-12 VAR)
Practical on-the-job experience in an agency setting. Prerequisite: senior standing or permission of instructor. (*) Repeatable

SOC 495 Independent Study (1-10 VAR)
Prerequisite: previous work in sociology and permission of instructor. (*) Repeatable

## GRADUATE COURSES

## SOC 500 Workshop (1-3 VAR)

Topics to be identified by subtitles taught. Prerequisite: sociology major, graduate standing. (*) Repeatable

SOC 540 Correctional Administration 3(3-0)
Major issues in correctional administration including the history and theories of corrections in the U.S. are analyzed. Prerequisite: graduate standing. (*)

## SOC 590 Special Projects (1-3 VAR)

Projects identified by each faculty member in concert with his/her interests and expertise. Prerequisite: Sociology major, graduate standing. (*) Repeatable

SOC 591 Special Topics (1-3 VAR)
Topics identified by subtitles taught. Prerequisite: graduate standing. (*) Repeatable

SOC 595 Independent Study (1-10 VAR)
Affords students the opportunity to do independent, creative work. Prerequisite: graduate standing and permission of instructor. (*) Repeatable

## SOCIAL SCIENCE (SOCSC) UNDERGRADUATE COURSES

SOCSC 151 Society and Technology 3(3-0)
Role of technology as a prime factor in changing social and political institutions. Addresses technology as the systematic application of organized knowledge and material tools to the extension of human faculties. (*)

SOCSC 209 African American Studies 3(3-0)
Overview of the historical, political, and socio-cultural experiences of African Americans. (*)

## SOCSC 493 Seminar 2(2-0)

Various problems within the realm of social science utilizing an integrated approach. For majors in broad area social science disciplines. (*) Repeatable

SOCSC 591 Special Topics 2(2-0)
Topics identified by subtitles taught. Prerequisite: graduate standing. (*) Repeatable

SOCSC 593 Seminar 2(2-0)
Various problems within the realm of social science, utilizing an integrated approach. For majors in broad area social science disciplines. Prerequisite: graduate standing. (*) Repeatable

## SPEECH COMMUNICATION (SPCOM)

## UNDERGRADUATE COURSES

## SPCOM 103 Speaking and Listening 3(3-0)

Introduces principles of speaking and listening with emphasis on exposition and its application to public speaking. ( $F, S, S S$ )

SPCOM 116 Beginning Sign Language 3(3-0)
Introduction to the fundamentals of communicative interaction with and among the deaf by means of hand symbolization. (F)

## SPCOM 211 Public Speaking (2-3 VAR)

Emphasis is placed upon audience analysis, proof, and speaker credibility in order to persuade audiences. Application made through classroom presentations and analysis of models. (*)

## SPCOM 212 Argumentation 2(2-0)

Argumentation focuses on the methods advocates employ to make rational decisions and to win assent to others' statements. Particular emphasis on the nature and skills of reasoned discourse. (*)

SPCOM 216 Intermediate Sign Language 3(3-0)
Study and application of the American Sign Language, including conversational skills, gestures and deaf cultures. Prerequisite: SPCOM 116 or permission of instructor. (S)

SPCOM 221 Interpersonal Communication 3(3-0)
The principles and skills of speaking applied to informal speaking situations. Topics covered include openness, genuineness, and talking appropriately to people. (*)

SPCOM 260 Language Acquisition and Linguistics 3(3-0) Normal processes of development of language in children, growth of language, including structure, comprehension, use of oral and written language, other symbolic behavior. (F)

SPCOM 291 Special Topics (1-3 VAR) (*) Repeatable
SPCOM 295 Independent Study (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable
SPCOM 312 Persuasion (2-3 VAR)
Examination of the principles and theories of persuasion and their application to persuasive settings. Emphasis on using language to secure belief and action. Prerequisite: SPCOM 211, 212, or permission of instructor. (*)

SPCOM 335 (ENG, WS 335) Gender and Communication 3(3-0)
This course examines the ways that gender affects communication behaviors and helps develop an awareness of the processes that affect gender socialization and stereotyping. (*)

SPCOM 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable
SPCOM 495 Independent Study (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable

## SPANISH (SPN) <br> UNDERGRADUATE COURSES

SPN 100 Intro to Conversational Spanish 3(3-0)
Basis skills for understanding and speaking Spanish. (*)
SPN 101 Beginning Spanish I 3(3-0)
Development of skills in speaking, listening, reading, writing; and cultural understanding ( $\mathrm{F}, \mathrm{S}, \mathrm{SS}$ )
SPN 102 Beginning Spanish II 3(3-0)
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: SPN 101 or departmental placement test. (F,S,SS)

SPN 130 Cultures of the Spanish-Spkg World 3(3-0)
Topics in the history, literatures, and art of selected SpanishSpeaking cultures, taught in English. (*)

## SPN 201 Intermediate Spanish I 3(3-0)

Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: SPN 102 or departmental placement exam. (F,S)

SPN 202 Intermediate Spanish II 3(3-0)
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: SPN 201 or departmental placement exam. (F,S)

SPN 203 Intermediate Proficiency Building 3(3-0)
Solidification of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: SPN 102 or departmental placement exam. (F,S)

## SPN 287 Intensive Spanish Study Abroad (1-9 VAR)

Study of Spanish in an immersion setting abroad, preparing the student for fluency through the study of grammar, civilization and culture, at an approved institution. Prerequisite: SPN 102 and permission of instructor. (*) Repeatable (9)

SPN 300 Spanish Phonetics and Phonology 3(3-0)
Theory and practice of Spanish language and speech patterns; how to produce and to teach the Spanish sound system accurately. Prerequisite: SPN 202 and 203, or equivalent. ( $\mathrm{F}, \mathrm{S}$ )

SPN 301 Advanced Spanish Grammar 3(3-0)
A concentrated study of Spanish grammar in addition to practice in writing, reading, speaking, and listening. Prerequisite: SPN 202 and 203 or equivalent. (F,S)

SPN 302 Conv \& Comp: Mexico \& Central Amer. 3(3-0)
Focus on improving linguistic proficiency within the context of Mexican and Central American cultures. Prerequisite: SPN 202 and 203 or equivalent. (*)
SPN 303 Conv \& Comp: South America 3(3-0)
Focus on improving linguistic proficiency within the context of South American cultures. Prerequisite: SPN 202 and 203 or equivalent. (*)

SPN 304 Conv \& Comp: Caribbean 3(3-0)
Focus on improving linguistic proficiency with the context of Caribbean Hispanic cultures. Prerequisite: SPN 202 and 203 or equivalent. (*)

SPN 305 Conv \& Comp: Spain 3(3-0)
Focus on improving linguistic proficiency within the context of Spanish cultures. Prerequisite: SPN 202 and 203 or equivalent. (*)

SPN 306 Conv \& Comp: United States 3(3-0)
Focus on improving linguistic proficiency within the context of Hispanic/Latino cultures in the United States. Prerequisite: SPN 202 and 203 or equivalent. (*)

SPN 309 Intro to Hispanic Linguistics 3(3-0)
Fundamental terminology and concepts in linguistics; overview of Spanish sound system (phonology), word formation (morphology), phrase structure (syntax), etc. Prerequisite: SPN 300 and 301. (*)

SPN 310 Introduction to Hispanic Literature 3(3-0)
Study of the basic tools necessary for analysis and understanding of literature; application of these tools through reading, writing, and discussion of Hispanic texts. Prerequisite: SPN 301 or permission of the instructor. (F,S)

## SPN 331 Spanish in the Business World 3(3-0)

Focus on improving linguistic proficiency within the context of the Hispanic business world. Prerequisite: SPN 202 and 203 or equivalent. (*)

SPN 387 Intensive Spanish Study Abroad (1-12 VAR)
Study of Spanish in an immersion setting abroad preparing the student to become fluent in the language through the study of grammar, civilization and culture. Prerequisite: SPN 202 and 203 or permission of instructor. (*) Repeatable (12)

SPN 391 Special Topics 3(3-0)
Prerequisite: SPN 202 and 203. ( ${ }^{*}$ ) Repeatable (9)
SPN 411 Survey of Spanish Literature 3(3-0)
A panoramic overview of Castilian literature from the earliest works in the vernacular to the writings of the post-Franco era. Prerequisite: SPN 310 or permission of instructor. (*)

SPN 412 Survey of Spanish American Literature 3(3-0) An introduction to the literary and cultural texts of Spanish America and their social, political, intellectual, creative and historical implications. Prerequisite: SPN 310 or permission of instructor. (*)

SPN 421 18th and 19th Century Spanish Literature 3(3-0) The study of representative works of Spanish literature from 1700 to 1898. Prerequisite: SPN 310 or permission of instructor. (*)

## SPN 422 Spanish American Literature from 1900 to 1950

 3(3-0)Intensive analysis of selected readings of Spanish American literature of the first half of the twentieth century. Prerequisite: SPN 310 or permission of instructor. (*)

SPN 424 The Mexican Revolution 3(3-0)
Critical reading of selected texts of the Mexican Revolution and its historical context. Prerequisite: SPN 310 or permission of instructor. (*)

SPN 451 Contemporary Spanish Literature 3(3-0)
Critical reading of selected works of contemporary Spanish Literature. Prerequisite: SPN 310 or permission of instructor. (*)

## SPN 452 Contemporary Spanish American Literature

 3(3-0)Critical reading of selected works of contemporary Spanish American Literature. Prerequisite: SPN 310 or permission of instructor. (*)

SPN 460 Literary Theory and Hispanic Literature 3(3-0)
The application of contemporary theory to the reading of Hispanic literature. Prerequisite: SPN 310 or permission of instructor. (*)

SPN 461 Cervantes 3(3-0)
The study of Cervantes, his major works and the period in which they were written. Prerequisite: SPN 310 or permission of instructor. (*)

## SPN 462 19th Century Spanish American Literature

3(3-0)
The study of representative 19th Century writers: works by Olmedo Bello, Heredia, Palma, Prieto, Jotabeche, Isaacs, etc. Prerequisite: SPN 310 or permission of instructor. (*)

## SPN 471 Medieval and Golden Age Spanish Literature

 3(3-0)An overview of Spanish literature of the Middle Ages and Golden Age, including the evolution of the Spanish language and dominant literary genres. Prerequisite: SPN 310 or permission of instructor. (*)

SPN 472 Colonial Spanish American Literature 3(3-0)
An introduction to the literary and cultural texts of Spanish America before Independence. Prerequisite: SPN 310 or permission of instructor. (*)
SPN 491 Special Topics (1-3 VAR)
Prerequisite: SPN 310 or permission of instructor. (*) Repeatable

## SPN 493 Senior Seminar 3(3-0)

In-depth analysis of specific topics, themes, authors, and works in the language literatures and cultures of the Spanish speaking world. Prerequisite: SPN 310 or permission of instructor. (*)

## SPN 494 Field Experience (1-7 VAR)

Communication, lectures by writers, artists, political leaders and specialists. Visits to museums, attendance at movies, theaters and excursions. Prerequisite: SPN 301 or the equivalent and one of SPN 302-306 plus permission of the instructor. (F,S) Repeatable

SPN 495 Independent Study (1-3 VAR)
Specific themes which address particular problems of literature or culture. May be repeated for credit with approval of major adviser. Prerequisite: SPN 301 or the equivalent and one of SPN 302-306 plus permission of the instructor. (F,S) Repeatable

## GRADUATE COURSE

## SPN 591 Special Topics (1-3 VAR)

Prerequisite: graduate standing and permission of instructor. (*) Repeatable (9)

## SOCIAL WORK (SW)

## UNDERGRADUATE COURSES

SW 100 Introduction to Social Work 3(3-0)
Introduction to the history and philosophy of the social work profession including the knowledge, values, ethics, roles and skills inherent in social work practice. (F,S)

SW 201 Human Behavior and Social Environment 3(3-0)
Focus on the person in environment throughout the life span with an examination of the relationship between biological, psychological, social, spiritual and cultural systems. Prerequisite: SW 100. Corequisite: SOC 101, PSYCH 100. (F)

SW 202 Human Behavior and Social Environment II 3(3-0) Focus on the person in environment throughout the lifespan with an examination of the impact of larger social systems, including family, groups, communities and organizations. Prerequisite: SW 201. (S)

## SW 205 Social Welfare in the United States 3(3-0)

Examines the historical development of social work in the United States social welfare system. Critical thinking techniques will be used to analyze policy. ( $F, S$ )
SW 210 Statistics for Social Worker 3(3-0)
Introduction to qualitative and quantitative data analysis. Emphasis on descriptive and inferential statistics most utilized in evidence-based social work practice and research. ( $F, S$ )

SW 222 Introduction to Social Work Practice 3(2-2)
Application of the foundation of generalist practice skills. Requires 45 clock hours of volunteer work in an approved human service agency. Prerequisite: SW 201. (F,S)

SW 225 Social Work Policies and Procedures 1(1-0)
Provides fundamental knowledge for social work majors. Includes ethics, handbook, and standards. Corequisite: SW 100, SW 201, SW 202, SW 205, and/or SW 222. (F,S,SS/E)

SW 230 (CS 230) Chicano: Social and Psychological Study 3(3-0)
Social and psychological forces present in the Chicano community. (F)

## SW 235 Professional Writing in Social Work 3(3-0)

Ethical and professional documentation for case records and publication in social work practice. Emphasis on current documentation practices and APA writing. Prerequisite: SW 100. (F)

SW 250 American Indian Issues 3(3-0)
Foundational knowledge for those interested in working with American Indians; includes law, policy, health, social, community and other issues of reservation and urban populations. Prerequisite: SW 100. (S)

SW 290 Special Projects (1-5 VAR)
Prerequisite: permission of instructor. (*)

## SW 310 Social Work Theory 3(3-0)

A comparative approach to explanatory and practice theories relating to social work and the helping professions. Prerequisite: acceptance into the Social Work Program. (F)

## SW 320 Human Diversity in Practice 3(3-0)

Critically examines the history, culture, strengths and barriers in social work practice with diverse groups. Identifies skills required for culturally competent practice with populations-atrisk. Prerequisite: acceptance into the Social Work Program. Corequisite: CS 101 or SW/CS 230, and/or a Women's Studies course. (F)

SW 322 Social Work Intervention I 3(3-0)
Elements of generalist micro social work practice and theory. Skill development in assessment, intervention, and evaluation emphasized. Prerequisite: acceptance into the Social Work Program. Corequisite: students who have not yet completed SW 310 and SW 320 must enroll concurrently. (F)

SW 323 Social Work Intervention II 3(3-0)
Generalist mezzo social work practice focusing on small groups and families. Includes assessment, intervention, evaluation and practice theory. May take concurrently with SW 324. Prerequisite: acceptance into the Social Work Program. (S)

SW 324 Social Work Intervention III 3(3-0)
Social work theories and interventions at the macro level; community and organization generalist practice. May take concurrently with SW 323. Prerequisite: acceptance into the Social Work Program. (S)

## SW 325 (CS 325) Health in the Chicano Community

 3(3-0)Health care traditions and current health care systems in the barrio. (S)

## SW 326 SW Practice with Older Adults 3(3-0)

The biological, psychological, social, cultural and spiritual aspects of aging and the services affecting them. Prerequisite: junior standing or consent from instructor. (*)

SW 327 Child Welfare 3(3-0)
The physical, behavioral, emotional signs of child abuse and neglect; laws designed to protect children, and services available to assist them. Prerequisite: junior standing or consent of instructor. ( ${ }^{*}$ )

SW 340 Reintegration for Military Families 3(3-0)
Critically examines the history, culture, strengths and barriers in social work practice with clients who have served in the military and their family members. Prerequisite: SW 100. (F)

SW 350 Social Welfare Policy 3(3-0)
Theory and social work practice related to social policy, problem identification, policy formation, implementation, evaluation and analysis. Development of critical thinking skills for policy analysis. Prerequisite: acceptance into the Social Work Program. Corequisite: any ECON or POLSC course. (S)

## SW 365 Understanding Mental Health 3(3-0)

This course provides an introduction to behavioral health diagnoses in the adult population. Prerequisite: SW 202. (S)

SW 481 Field Seminar I 3(3-0)
Capstone course which integrates knowledge, values, skills, and theory with micro, mezzo, macro generalist social work practice with diverse populations in various agency settings. Prerequisite: acceptance into the Social Work Program; successful completion of all SW courses with the exception of field courses. Corequisite: SW 488. (F,S,SS)

## SW 482 Field Seminar II 3(3-0)

Capstone course which integrates knowledge, values, skills, and theory with micro, mezzo, macro generalist social work practice with diverse populations in various agency settings. Prerequisite: SW 481, SW 488. Corequisite: SW 489. (F,S,SS)

SW 488 Field Placement I 5(0-16)
Sixteen clock hours per week Fall, 32 per week Spring or Summer I Block for 224 hours in approved agency supervised by professional social worker. Prerequisite: acceptance into the Social Work Program and field practicum; successful completion of all required SW courses with the exception of field courses. Corequisite: SW 481. (F,S,SS)

SW 489 Field Placement II 5(0-16)
Sixteen clock hours per week Spring, 32 per week Spring or Summer II Block for 224 hours in approved agency supervised by professional social worker. Prerequisite: SW 481, SW 488. Corequisite: SW 482. (F,S,SS)

SW 490 Special Projects (1-5 VAR)
Prerequisite: social work major, prior written permission of instructor of record. (*)
SW 491 Special Topics (1-3 VAR) (*)
SW 492 Research 3(3-0)
Theory and application of continuing social work research designs and methodologies (qualitative and quantitative) utilizing single subject design, needs assessment, and program evaluation. Prerequisite: SW 320 and SW 322. Corequisite: SW 210 or MATH 156 or equivalent statistics course. (F,S)

SW 495 Independent Study (1-3 VAR)
Prerequisite: permission of instructor. (*)

## THEATRE (TH)

## UNDERGRADUATE COURSES

TH 111 Theatre Appreciation 3(3-0)
A course emphasizing the understanding of theatre art from the audience's point of view. (*)

TH 112 Film Appreciation 3(3-0)
The course will address film as a major subject of audio-visual literacy, including a brief introduction to criticism and history of modern film. (*)

TH 370 Creative Dramatics 1(1-0)
Classroom techniques in dramatics for the teacher. (F,SS)

## UNIVERSITY STUDIES (US) UNDERGRADUATE COURSES

## US 101 Academic \& Career Exploration 1(1-0)

Provides undeclared/declared students who are still deciding on their majors an opportunity to assess their abilities, interests and goals while investigating the University's degree programs. (F)

US 151 Introduction to Academic Life 3(3-0)
To provide an opportunity for students to learn and adopt methods to be successful in college. Critical thinking, writing and time management are emphasized. ( $F, S$ )

## US 160 Principles of Leadership 3(3-0)

Study of leadership theories and principles. The course emphasizes components of leadership, gender, ethnic diversity in leadership styles, organizational forms, and personal capacity for leadership. Prerequisite: Acceptance into President's Leadership Program. (F)

US 201 Domestic Violence Theories-Family 3(3-0)
Explores five areas within the family system impacted by domestic violence. Victims and perpetrator issues, patterns of relationship abuse, effects on children. ( $F, S, S S$ )

US 202 Domestic Violence Theories-Society 3(3-0)
Explore societal impacts of domestic violence in relation to sociopolitical, multicultural, and gender issues. Review laws pertaining to domestic violence, and community resources. (F,S,SS)

## US 251 Student Leadership Development 2(2-0)

Create an opportunity for students to define, learn, adopt, and integrate within themselves the purpose of leadership". (S)

## US 255 Residence Hall Advising 1(1-0)

Will teach student development theory, history of residence life, communication skills and assertiveness training which will enhance the quality of student leaders and resident advisors. (S)

US 260 Leadership in Service Organizations 3(2-2) Lecture/experiential course outlining leadership practices through service learning in community settings. Open to PLP students only. Prerequisite: US 160, enrollment in PLP. (F)

## US 291 Special Topics (1-3 VAR)

Special topics are offered to students in areas where regular course offerings are not available. (*)

US 320 Offenders and Addictive Behaviors 3(3-0)
Causes, stages and symptoms of addiction processes including cross tolerance and addiction substitutions. Differential interventions and treatment options are explored. Prerequisite: PSYCH 100 \& SOC 101. (F,S,SS)

US 340 Evaluation and Interviewing Skills 3(3-0)
Addresses the skills and procedures needed to evaluate and develop appropriate treatment plans for voluntary and involuntary clients. Prerequisite: US 201 or US 202. Corequisite: PSYCH 362 (F,S,SS)

US 350 Orientation Leadership Training 3(3-0)
Course emphasis is to develop a student's leadership and communication skills, enhance knowledge and understanding of University policies and procedures and campus resources and services. (S)

US 355 Becoming an Effective Tutor 3(2-2)
Concepts and techniques of effective tutoring, including issues such as communication, rapport, confidentiality, learning styles, disabilities, and general study skills. Limited hands-on experience required.

## US 360 Applied Leadership 3(3-0)

Leadership in action course applying needs assessments, analysis, strategy development, implementation and evaluation to a team project in private, public or nonprofit sector. PLP required. Prerequisite: US 260, enrollment in PLP. (F)

US 420 Counseling Techniques for Offenders 3(3-0)
Gain technical skills involved in counseling unmotivated and resistive clients in voluntary and involuntary program settings. Prerequisite: US 340, PSYCH 464 or SW 322. Corequisite: PSYCH 475 \& SW 323. (F,S,SS)

US 460 Working with Experienced Leaders 3(1-4) Lecture/practicum course assigning students to leader mentorship in public, private, or government sector. Leadership issues and challenges in a structured, but applied setting. Prerequisite: US 360, enrollment in PLP. (F,S,SS)

US 484 Field Placement I - Victim Services 3(0-7)
Acquire hours in victim services programs toward the necessary 1000 experience hours toward certification in DV counseling in Colorado. Prerequisite: US 201, 202, 340 \& Instructor Permission. (F,S,SS)

## US 485 Field Placement II-Substance Abuse Services

## 3(0-7)

Acquire hours in substance abuse services programs toward the necessary 1000 experience hours toward certification in DV counseling in Colorado. Prerequisite: US 320, 484 \& Instructor Permission. (F,S,SS)

## US 486 Field Placement III-Perpetrator Treatment Services

 3(0-7)Acquire hours in perpetrator treatment services programs toward the necessary 1000 experience hours toward certification in DV counseling in Colorado. Prerequisite: US 420, 485 \& Instructor Permission. (F,S,S)

US 489 Field Placement in Leadership 3(0-3)
A semester-long internship where students take on a supervised leadership role within an organization. Prerequisite: US 160, US 260, and US 360. Corequisite: student must be enrolled in President's Leadership Program. (F,S,SS)

## US 491 Special Topics (1-3 VAR)

Special topics are offered to students in areas where regular course offerings are not available. Prerequisite: junior or senior standing and permission of instructor. (*)

## WOMEN'S STUDIES (WS)

## UNDERGRADUATE COURSES

WS 100 Introduction to Women's Studies 3(3-0)
The course serves two purposes: (1) to train students in feminist perspective-taking, and (2) to introduce them to issues affecting women's lives using an interdisciplinary framework. (F,S)

WS 105 (POLSC, PSYCH, SOC 105) Understanding Human Diversity 3(3-0)
Americans live in a complex and diverse society. This course examines the nature, impact, and strategies for dealing with diversity in personal and social contexts. (*)

WS 206 (SOC 206) Gender and Society 3(3-0)
Examination and evolution of relationships between sex roles, culture, and societal institutions and processes, including an analysis of sexual stratification. (*)

WS 211 (PSYCH 211) Women and Society 3(3-0)
Statistical overview of the current status of women, followed by examination of theories concerning equality of the sexes. (F)

## WS 212 (PSYCH 212) Sexism and Racism in America

## 3(3-0)

Dynamics of prejudice and discrimination in terms of sex and race; special attention to analysis of strategies for improving relations. (S)

WS 230 (NSG 230) Women, Health and Society 3(3-0) Introduction to women's health issues and a basic understanding of how women's health has been influenced historically, culturally and by socio-economic factors. (*)

WS 231 (PSYCH, SOC 231) Marriage, Family, and Relationships 3(3-0)
Marriage and family from an institutional and relationship perspective; cross-cultural diversity, mate selection, marital dynamics, parenting, divorce, remarriage, emerging patterns. (F,S,SS)

WS 235 (MCCNM 235) Women and Media 3(3-0)
The historical and cultural implications of the mass media's portrayal of women and the extent of their media participation from colonial to contemporary times. (*)

## WS 291 Special Topics (1-3 VAR) (*) Repeatable

WS 301 Theories of Gender, Race, and Class 3(3-0) Interdisciplinary exploration of feminist theories and the relationships between identity, gender, race, ethnicity, class and other variables. Examines connections between knowledge, ethics, and activism. (*)

WS 305 (SOC 305) Crime and Women 3(3-0)
Exploration of social, cultural and political variables that create both women victims and women criminals. (*)

WS 306 (CS 306) La Chicana 3(3-0)
A social, cultural, and historical overview of the Chicana experience and contributions. (F,S)
WS 330 (MCCNM 330) Gender and Film 3(3-0)
A discussion course which examines gender roles in theatrical and documentary film while considering the perspective of producers, actors, and spectators and salient film theories. Prerequisite: upper division standing in MCCNM or Women's Studies. (*)

## WS 335 (ENG, SPCOM 335) Gender and Communication

 3(3-0)This course examines the ways that gender affects communication behaviors and helps develop an awareness of the processes that affect gender socialization and stereotyping. (*)

WS 340 (ENG 340) Women in Literature 3(3-0)
Intensive study of literature written by women, in historical, cultural, and critical contexts. Prerequisite: ENG 102. ( ${ }^{*}$ )

WS 341 (CS 341) Chicana Writers 3(3-0)
Survey of Chicana writers from the early 1900s to the present. Along with the literature, aspects of history, sociology and politics will be incorporated. (*)

WS 401 (CS 401) Third World Feminisms 3(3-0)
This course focuses on Third World women's challenging views of global feminism and feminist representations of -other" women. (*)

## WS 403 (SOC 403) Human Sexuality and Social Behavior

 3(3-0)Sexuality and sexual conduct from a sociological and social psychological perspective. Prerequisite: junior or senior standing. (*)

WS 407 (SOC 407) Family Violence 3(3-0)
The extent, seriousness, and impact of the major forms of domestic violence. (*).

## WS 427 (HIST 427) Women \& Gender in European History

 3(3-0)Examines impact of women and ideas about gender on aspects of European history since 1500; and examines impact of historical changes on women and gender. Prerequisite: HIST 103 or permission of instructor. (*)

WS 428 (HIST, SOC 428) Women \& Work 3(3-0)
Examines historical and contemporary issues for women of various economic, social, and ethnic groups, especially in the US; examines gender ideologies about paid, unpaid work. Prerequisite: junior or senior standing or permission of instructor. (*)

WS 453 (SOC 453) The Sociology of the Body 3(3-0)
Exploration of what it is like to live through (in/with/as) our female and male bodies. Examination of writings in the field of body studies. Prerequisite: SOC 101. (S)

WS 455 (SOC 455) Hate Crimes 3(3-0)
Examines assumptions about race, gender, sexuality, and others that are used to justify hate crimes; examines common forms, emphasizing causal factors and effects. Prerequisite: SOC 101. (*)

## WS 485 Capstone 3(3-0)

Students will develop a project in which they will develop and execute a research assignment related to ethnicity, gender, or diversity. Prerequisite: senior level standing; permission of the instructor. (*)

## WS 490 Special Projects (2-6 VAR)

Allows one or more students to conceptualize, create, and complete a project relating to women's studies, under supervision of faculty member(s) approved by WS program. Prerequisite: WS minor, junior or senior standing, and approval of WS curriculum committee. (*) Repeatable (6)

## WS 491 Special Topics (1-3 VAR)

Prerequisite: junior or senior standing with adequate preparation or permission of instructor. (*) Repeatable

## WS 492 Research (2-6 VAR)

Research project selected by student and supervised by a faculty member with the approval of WS. May be repeated for a maximum of 6 credits. Prerequisite: WS minor, junior or senior standing, and approval of WS curriculum committee. (*) Repeatable (6)

## WS 494 Field Experience (2-6 VAR)

Application of the WS disciplinary framework to an off-campus volunteer work experience, under the supervision of a faculty member approved by WS. Prerequisite: WS minor, junior or senior standing, and approval of WS curriculum committee. (*) Repeatable (6)

## WS 495 Independent Study (1-3 VAR)

Prerequisite: permission of instructor. (*)
WS 498 Internship (2-6 VAR)
Application of the WS disciplinary framework to a work experience, under the direction of the selected site and a faculty member approved by WS. Prerequisite: WS minor, junior or senior standing, and approval of WS curriculum committee. (*) Repeatable (6)

## BOARD OF GOVERNORS OF THE COLORADO STATE UNIVERSITY SYSTEM (as of April 2013)

Voting Members<br>Dennis E. Flores<br>Mark A. Gustafson<br>Ed J. Haselden<br>Dorothy Horrell<br>Scott C. Johnson<br>Mary Lou Makepeace<br>William E. Mosher<br>Demetri E. "Rico" Munn<br>Joseph C. Zimlich<br>\section*{Non-Voting Members}<br>Dr. Carole Makela .......................CSU Faculty Representative<br>Regina Martel.<br>$\qquad$ CSU Student Representative<br>Dr. Frank Zizza<br>$\qquad$ CSU-Pueblo Faculty Representative Vanessa Emerson .CSU-Pueblo Student Representative Richard Weinberger..........CSU Global Faculty Representative<br>Kandi Brown .<br>$\qquad$ .CSU Global Student Representative

## COLORADO STATE UNIVERSITY SYSTEM STAFF

Chancellor's Office
Dr. Michael Martin
Melanie Geary
CSU System Chancellor Executive Assistant to the Chancellor

Office of the Board of Governors
Sharon Teufel Executive Assistant to the Board of Governors

Academic Administration
Dr. Rick Miranda Chief Academic Officer

## Audit

Allison Horn Director of Internal Auditing

## Finance

Rich Schweigert
Bridget Mullen
Robert Osika
Chief Financial Officer
Director of Budget and Finance
Gus Skinner
System Treasurer
Dee Martinez
Director of Human Resources
General Counsel
Mike Nosler
General Counsel
Sande Bitner
Executive Assistant
Public Relations, Business and Community Development Kyle Henley Director of Public Relations and

Business and Community
Development

## System Universities

Colorado State University-Fort Collins
Dr. Anthony A. Frank President
Katie Kalkstein
Executive Assistant
Colorado State University-Pueblo
Dr. Lesley Di Mare President
Trisha Macias Executive Assistant
Colorado State University-Global Campus
Dr. Becky Takeda-Tinker President

## ADMINISTRATIVE OFFICES

(Colorado State University-Pueblo)

## OFFICE OF THE PRESIDENT

Di Mare, Lesley, President
Folda, Joe, Director, Athletics
Kreminski, Richard M., Acting Director, Institutional Research \& Analysis
Macias, Trisha, Executive Assistant to the President
Mullen, Jennifer, Chief of Staff
Samora, Tracy, Director of Alumni Relations
Zaletel, Cora, Executive Director of External Affairs
(Vacant), Vice-President of Student Services and Enrollment Management

## OFFICE OF THE PROVOST

Wright, Carl, Provost and Vice-President for Academic Affairs Baird, Tanya, Interim Executive Assistant to the Provost

Chambers, Pam, Interim Director of Student Academic Services

Frew, Erin J., Assistant Provost for Assessment \& Student Learning

Gonzales, Rhonda, Dean, University Library
Kreminski, Richard M., Dean, College of Science and Mathematics

Lopez, Derek, Director, Recruitment and First-Year Programs
Malm, James, Dean of Continuing Education
Marquesen, Victoria, Associate Dean of Teacher Education, College of Education, Engineering, and Professional Studies

Matola, Erich, Chief Information Officer
Pratarelli, Marc, Director of University Honors Program
Proctor, Kristina, Interim Dean of Graduate Studies and Research

Raymond, Bruce C., Dean, Hasan School of Business
Sonnema, Roy, Dean, College of Humanities and Social Sciences

Wofford, Donna, Associate Dean of Nursing, College of Education, Engineering, and Professional Studies
(Vacant), Dean, College of Education, Engineering, and Professional Studies

## OFFICE OF THE VICE PRESIDENT FOR FINANCE AND ADMINISTRATION

Hanifin, Marty, Vice-President for Finance and Administration
Cason, Craig, Associate Vice President for Facilities Management
Fendrich, Chris, Interim Director, Auxiliary Services
Gonzales, Robert G., Director/Controller Business Financial Services

Jacobs, Ralph, Director, Human Resources
Mestas, Amanda, Executive Assistant to the Vice President for Finance and Administration

## ADMINISTRATIVE/FACULTY

Di Mare, Lesley (2011) President, Colorado State UniversityPueblo; BA, California State University-Chico; MA, California State University-Hayward; Ph.D., Indiana University

Gonzales, Rhonda (1999) Dean, University Library; BA, Colorado College; MSLIS, Simmons College

Kreminski, Richard M. (2009) Dean of College of Science and Mathematics and Acting Director of Institutional Research; S.B., Massachusetts Institute of Technology; MA, Ph.D., University of Maryland; J.D., Dedman School of Law, Southern Methodist University

Malm, James (2005) Dean, Continuing Education; BS, MPA, Penn State; D.M., University of Maryland

Marquesen, Victoria (1999) Associate Dean of Education, College of Education, Engineering, and Professional Studies; BA, Colorado College; MA, University of Kansas; Ph.D., University of Kansas

Mullen, Jennifer (1990) Chief of Staff; BA, Colorado State University-Pueblo; MA, University of Northern Colorado

Proctor, Kristina G. (1989) Interim Dean of Graduate Studies and Research and Professor of Chemistry; BS, Colorado State University-Pueblo; Ph.D., Colorado State University

Raymond, Bruce C. (2012) Dean, Hasan School of Business; BS, Brigham Young University; MBA, Ph.D., University of Utah

Sonnema, Roy B. (2000) Dean, College of Humanities and Social Sciences and Professor of Art; BA, Calvin College; MA, California State University Fullerton; Ph.D., University of California at Berkeley

Wofford, Donna (2010) Associate Dean of Nursing, College of Education, Engineering, and Professional Studies; BS, Baylor University; MS, Texas A\&M University-Corpus Christi; Ph.D., Texas Woman's University-Houston

Wright, Carl (2013) Provost and Vice-President for Academic Affairs; BS, Virginia State University; MBA, Virginia Commonwealth University; Ph.D., Jackson State University

## ADMINISTRATIVE/PROFESSIONAL STAFF

Adams, Kate (2011) Interim Human Resources Associate; BSBA, MBA, Colorado State University-Pueblo

Alexander, Kelly (2008) Assistant Athletic Trainer, Athletics; BS, University of Wisconsin-Eau Claire

Atencio, Mike (2007) Station Manager, KTSC-FM; BS, Colorado State University-Pueblo

Archuleta, Steven (2011) Counselor, Upward Bound; BS, University of Colorado at Boulder; M.Ed., Colorado State University-Fort Collins

Armijo, Tawnya (2011) Counselor and Denver Scholarship Foundation Advisor, Admissions; BS, University of Colorado at Denver

Babler, Kendall (2012) Assistant Women's Basketball Coach, Athletics

Baird, Tanya (2006) Interim Executive Assistant to the Provost; BA, MNM, Regis University

Barnosky, John (2007) Architect, Colorado License \#B-835, Director of Planning/Construction, Facilities/Physical Plant; BA, University of Colorado

Beltran, Christopher P. (2011) Director, Veterans Upward Bound; BA, Colorado State University-Pueblo; MSW, Colorado State University

Benesch, Susan (2001) Human Resources Associate; BSBA, University of Northern Colorado

Boughton, Kynna (2009) Financial Aid Counselor, Financial Aid; BSBA, Colorado State University-Pueblo

Boynton, Jessica L. (2011) Director, Student Judicial Affairs; BS, Cornell University; J.D., University of Denver, Sturm College of Law

Brewer, Margaret (1997) Systems Manager, Financial Aid; BSBA, Colorado State University-Pueblo

Brewer, Shaun (2008) Assistant Wrestling Coach, Athletics
Brice, Sandy (2006) Academic Advisor, First-Year Programs; BS, Colorado State University-Pueblo

Campbell, Howard (2002) Interim Manager, Network/ System Services, Information Technology Services; BS, Colorado State University-Pueblo

Campbell, Janell (2008) Citadel Site Manager, Continuing Education; BS, Austin Peay State University; MS, Murray State University

Capo, Darcie (2007) Transfer Coordinator, Admissions; BS, Fort Hays State University

Capo, Jeremy (2007) Associate Athletic Director and Director of Development, Athletics; BS, MS, Fort Hays State University

Carsella, Jim (2004) Research Associate Surface Chemistry/Biochemistry, Chemistry Education; BS, Colorado State University; MS, Colorado State University-Pueblo

Cason, Craig (2004) Associate Vice President for Facilities Management; BS, University of Colorado-Boulder

Chambers, Pam (2000) Interim Director, Student Academic Services; BA, University of North Alabama; MSW, University of Alabama

Charles, Dax (2007) Head Wrestling Coach, Athletics; BS, Colorado State University-Pueblo; MBA, University of Phoenix

Chavez, Veronica (1989) Assistant Director, TRiO Educational Opportunity Center; BSW, Colorado State University-Pueblo

Choat, Dorothy (2009) Lamar Site Coordinator, TRiO Educational Opportunity Center; AGS, Lamar Community College

Clifton, Jishirll (2013) Counselor and Denver Scholarship Foundation Advisor, Admissions; BS, Colorado State University-Pueblo

Correa-Martinez, Yaneth (2012) PROPEL Curriculum Development Specialist; BS, MS, National University of Colombia

Creager, Ryan (2011) Assistant Men's Soccer Coach, Athletics; BS, Colorado State University-Pueblo

Creighton, Paul (2011) Defensive Line Football Coach, Athletics

Daugherty, Carol (2012) Director of Student Health and Counseling; AA, BSN, Colorado State University-Pueblo; MSN, FNP, Beth-El College of Nursing \& Health Sciences at University of Colorado, Colorado Springs

DeGolier, Karl (2011) Housing Area Coordinator/Residence Life and Housing; BS, M.Ed., Texas State University at San Marcos

De Herrera, Rick R. (2006) Assistant Director of Facilities
DemI, Amanda (2011) Assistant Director of Student Recreation, Assistant Women's Soccer Coach; BS, M.S.Ed., Northwest Missouri State University

Desmond, Lacy (2010) Marketing and Development Specialist, CSU-Pueblo Foundation; BS, Colorado State University

Devine, Katherine (2010) Disability Resource Coordinator, Student Academic Services; BS, Cameron University, MS Southwestern Oklahoma State University
Dillon, Greg (2009) Head Women's Golf Coach, Athletics; BSBA, Colorado State University-Pueblo

Drown, Kip (2005) Head Women's Basketball Coach, Athletics; BS, MS, Southwest Missouri State University

Duncan, Catherine (2010) Academic Advisor, Student Academic Services; BA, Old Dominion University; MA, University of Alabama-Birmingham; Ed.S., Florida State University

Duran, Elizabeth (2001) Degree Audit Specialist; Records Office; BS, University of Phoenix

Ellis, Tamarae (2010) Housing Area Coordinator/Residence Life and Housing; BS, Colorado State University; MA, University of Denver

Fendrich, Chris (2011) Interim Director, Auxiliary Services; BS, Bradley University

Folda, Joseph (1987) Athletic Director, Athletics; BS, University of Northern Colorado; M.Ed., Eastern Washington University

Foley, Peggy H. (2008) Advisor/Counselor, Department of Nursing; BS, Colorado State University-Pueblo

Frew, Erin J. (2008) Assistant Provost for Assessment \& Student Learning, Provost's Office; B.C.H., MS, Ph.D., New Mexico State University

Gallegos, Valerie (2007) Finance Manager, CSU-Pueblo Foundation; BS, Colorado State University-Pueblo

Gerler, Brad (2011) Head Women’s Tennis Coach, Athletics; BA, Colorado State University

Gibson, Jeanne D. (2005) Director, English Language Institute; BA, Brown University; MA, Ph.D., University of California at San Diego

Gjerde, Michelle B. (1997) Director, Career Center; BA, Colorado State University-Pueblo

Gomez, Jennifer (2011) Head Volleyball Coach, Athletics; BS, Colorado State University-Pueblo

Gonzales, Doreen Y. (2008) Nursing Program Associate; BA, MBA, University of Phoenix

Gonzales, Robert G. (2011) Director/Controller, Business Financial Services; BS, Colorado State University-Pueblo; MS, University of Colorado

Gonzales, Felix (1992) Field Coordinator, Social Work; BA, Colorado State University-Pueblo; MSW, Arizona State University

Gregorich, Megan (2011) Counselor, Admissions; BA, Gonzaga University

Grutt, Elizabeth (2006) Advisor, Continuing Education; BS, Colorado State University-Pueblo; MA, University of Colorado at Colorado Springs

Hanifin, Marty (2012) Vice-President for Finance and Administration; BA, Norwich University; MA, University of Virginia; MPA, University of Oklahoma; J.D., University of Virginia School of Law

Hanna, William (2012) PROPEL Data Analyst; BA, University of Colorado, Denver; MA, Colorado State University

Hatfield, John Paul (2005) Instrument Technician, Chemistry Department; BS, MS, Colorado State University-Pueblo

Hedrick, Allen (2009) Head Strength \& Conditioning Coach, Athletics; BA, Cal State University-Chico; MA, Cal State University-Fresno

Heiser, Janae (2012) Assistant Volleyball Coach, Athletics; BA, Colorado State University Pueblo

Hibbert, Keli (2002) Writing Room and CHASS GET Coordinator, Student Academic Services; BA, Colorado State University-Pueblo: MA, Colorado State University

Hughes, Hunter (2007) Football Defensive Coordinator, Athletics; MA, Middle Tennessee State University

Humphrey, Travis (2011) Assistant Baseball Coach, Athletics; BS, Colorado State University Pueblo

Jackson, Bernard (2011) Wide Receiver Football Coach, Athletics; BS, Colorado State University-Pueblo

Jacobs, Ralph (2012) Director, Human Resources. BA, Weber State University; MPA, University of Nebraska at Omaha

Johnson, Tommie (2009) Assistant Men's Basketball Coach, Athletics; BS, University of Colorado at Colorado Springs

Jubic, Janean (2012) Assistant Women's Basketball Coach, Athletics; BS, University of Colorado at Colorado Springs; MBA, Colorado Christian

Keller, Patricia (2012) Graduate Nursing Program Associate; BA, Colorado State University-Pueblo

Kelly, Todd (2003) President/CEO, CSU-Pueblo Foundation; BS, Colorado State University-Pueblo; MA, University of Northern Colorado

Kingrey, Tiffany (2008) Visitor Center Coordinator, Admissions; BA, Colorado State University-Pueblo

Koncilja, Geri (2001) Instructional Designer, Regional Access to Graduate Education (RAGE) Program; BS, Colorado State University-Pueblo; MS, Colorado State University-Global

Koschke, Josh (2009) Head Men's Golf Coach and Director of Marketing, Athletics; BS, Colorado State University-Pueblo

Krider, Jack (2008) Director Student Recreation; BA, MA, University of Northern Colorado

Laino, Heidi (1997) Assistant Director, NSE Coordinator, Center for International Programs; BSBA, MBA, Colorado State University-Pueblo

Leomiti, Donnell (2008) Football Defensive Backs Coach/Recruiting Coordinator, Athletics; BA, University of Colorado

Lisonbee, Laura (2011) Site Coordinator, Veterans Upward Bound; BA, Colorado State University-Pueblo

LoCascio, Ben (2011) Assistant Athletic Director/Tickets, Athletics; BS, Calvin College

Lopez, Derek (2007) Director, Recruitment and First-Year Programs; BA, Colorado State University-Pueblo; Ph.D., Stanford University

Lucero, Gene (2006) Educational Development Specialist, TRiO Student Support Services; BS, MBA, Colorado State University-Pueblo

Lundahl, Sandra L. (1985) Associate Director, Financial Aid; AAS, BSBA, Colorado State University-Pueblo

Macias, Trisha (2003) Executive Assistant to the President; BA; University of Colorado-Boulder; MBA, Colorado State University-Pueblo

Manos, Michael D. (2003) Executive Director, College Opportunity Programs/TRIO; BS, Central Missouri State University; MA, Webster University; MA, University of Colorado at Colorado Springs

Martin, Lisa (2005) Group Fitness Coordinator, Student Recreation; BS, Colorado State University-Pueblo

Martinez, Theresa M. (2012) Counselor, Upward Bound; BSBA, Colorado State University-Pueblo

Matola, Erich (2012) Chief Information Officer, Information Technology Services; AS, Community College of the Air Force; BA, University of Maryland, College Park; MA Chapman University; MS, College of Notre Dame, Belmont

McGivney, Sean (2006) Director of Admissions and Financial Aid; BS, University of Vermont

McKenzie, Kenneth (2011) Interlibrary Loan Assistant; BS, Colorado State University-Pueblo

McKinney, Joseph A. (2008) Academic Improvement Program Coordinator, Student Academic Services; BA, Colorado State University-Pueblo; MA, Colorado State University

McWilliams, Greg (2012) Apartment Manager-University Village, Residence Life and Housing

Melin, Carl (1985) Associate Director Transfer Counseling and Articulation, Admissions; BA, Adams State College; MS, University of Southern California

Mestas, Amanda (2005) Executive Assistant to Vice President for Finance and Administration; BSBA, Colorado State University-Pueblo

Micheli, Karen (2001) Program Associate, Teacher Education Program; BS, Barclay College

Milavec, Frank (2004) Student Technology Support Specialist, Information Technology Services; BS, Colorado State University-Pueblo

Miller, Jeff (2009) Web Communications Manager, External Affairs; BA, Columbia College

Milner, Patricia (2011) Program Manager, Continuing Education; BA, Sterling College; MA, University of Colorado, Denver; Ph.D., University of Colorado, Colorado Springs

Minatta, Louis (1996) Graduation Evaluator, Records Office; AAS, Pikes Peak Community College; BS, Colorado State University-Pueblo

Moore, Bettina (2012) PROPEL Project Director; BA, Lehigh University; ME, University of Colorado at Colorado Springs

Moore, Dennis (2002) Director, Hoag Hall; BA, Colorado State University-Pueblo

Moore, Derek (2009) Financial Aid Counselor, Financial Aid; BSBA, Union University

Moreschini, Shelly (2004) Director, President's Leadership Program; BS, Colorado State University-Pueblo; MA, Regis University

Moses, Ken (2011) Assistant Men's Basketball Coach, Athletics; BS, Colorado State University-Pueblo

Obregon, Victoria Ann (2011) Regional Site Coordinator, College Assistance Migrant Program; BA, Colorado State University-Pueblo

Ojeda, Bob (2012) Veterans Education Benefits Coordinator; BA, University of Puerto Rico; MS, University of Bridgeport

Pagnotta, Susie (2010) Manager of Gifts and Records, CSUPueblo Foundation; BA, Adams State College

Peralta, David (2009) Academic Advisor, First-Year Programs; BA Colorado State University-Pueblo

Perez, Angelina (2011) Graduation Evaluator, Records Office; BS, Colorado State University-Pueblo

Pfingston, Valerie (1997) Grant Accounting Coordinator, Controller's Department; BSBA, Colorado State UniversityPueblo

Potter, Nick (2012) Private Scholarship Administrator, CSUPueblo Foundation; BA, Colorado State University-Pueblo; MS, Colorado State University-Global

Regrutto, Paul (2012) Head Women's Soccer Coach, Athletics; BS, Colorado State University-Pueblo

Rincon, Eric (2004) Pueblo Site Coordinator, TRiO Educational Opportunity Center; BS, Colorado State University-Pueblo

Rivas, Lorenzo (2007) Graduation Evaluator, Records Office; BA, Colorado College

Rivera, Jamie (2007) Program Assistant, First-Year Programs; AS, Pueblo Community College

Robertshaw, Amy (2013) Registrar, Records Office; BS, University of Minnesota; MA, University of Colorado-Denver

Robertshaw, Scott (2004) Associate Director, Student Recreation; BS, Western Illinois University; MA, Georgia College \& State University

Robinson, Brett (2007) Assistant to the Director of Auxiliary Services-Technical Support, Auxiliary Services; BS, Colorado State University-Pueblo

Romero-Heyn, Nicole (2007) Transfer Counselor, Admissions; BS, Colorado State University-Pueblo

Samora, Tracy (2009) Director of Alumni Relations; BS, Colorado State University-Pueblo

Sanchez, Stan (1994) Head Baseball Coach, Athletics; BS, California State University; MA, Azusa Pacific University

Sandoval, John (2005) Academic Advisor and Advising Coordinator, First-Year Programs; BS, Adams State College

Sandstrom, Anthony (2007) Sports Information Director, Athletics; BA, Colorado State University-Pueblo

Schleif, Mark (2012) Head Men's Tennis Coach, Athletics; AA, Indian River Community College

Schneider, Erin (2011) Assistant Athletic Trainer, Athletics; BS, New Mexico State University; MS, California University of Pennsylvania

Sewell, Steve (2007) Football Running Backs Coach; Athletics; BA, University of Oklahoma

Sissom, Lia (1996) MBA Director and Special Assistant to the Chair and Dean, Hasan School of Business; BA, MS, Western Illinois University
Spencer-Workman, Sarah (2013) PROPEL Sustainability Education Specialist; BENVD University of Colorado, Boulder; MRP, University of Massachusetts; LEED Professional

Stanley, Roy (1994) Head Coach, Men's and Women's Soccer, Athletics; BA, Princeton University; MA, University of Tulsa

Street, Sommer (2012) Development Assistant, CSU-Pueblo Foundation; BSBA, Colorado State University-Pueblo

Symington, Christopher E. (2009) Assistant Football Coach, Athletics; BA, University of Colorado at Boulder

Tafoya, Amy L. (2012) Program Coordinator, Upward Bound; BS, University of Phoenix; MBA, Colorado Technical University

Taibi, Vonnie (2011) Head Cheer/Dance Coach, Athletics
Tapia, Felicia (2010) Online Writing Lab (OWL) Coordinator, Student Academic Services; BA, Colorado State UniversityPueblo

Thorsten, Greg (2005) Financial Aid Counselor, Financial Aid; BA, University of Northern Colorado

Trujillo-Aranda, Brenda (1996) Director, TRiO Student Support Services; AAS, Pueblo Community College; BS, Regis University; MA, Adams State College

Tuatoo, Vaiulatasi (2006) Instructor/Tutor Coordinator, TRiO Student Support Services; AA, American Samoa Community College; BA, Chaminade University of Honolulu; MA, San Diego State University; DPA, Golden Gate University

Turner, Ralph (2011) Head Men's Basketball Coach, Athletics; BA, Lipscomb University; MA, Tennessee State University

Vega, Theresa (2008) Trinidad Site Coordinator, TRiO Educational Opportunity Center; BA, Colorado State University-Pueblo

Velarde, Katie (2004) Finance Manager, Continuing Education; BSBA, MBA, Colorado State University-Pueblo

Vigil, Lisa (2011) Counselor, Admissions; BA, Colorado State University-Pueblo

Waggener, Beverly, (2004) Retention Specialist, Nursing; BSN, University of Missouri; MS, Portland State University

Walda, Kevin (2005) Assistant Director, TRiO Veterans Upward Bound; BS, University of Colorado, Colorado Springs

Ward, Craig (2012) Assistant Defensive Football Line Coach, Athletics

Wesolowski, Michelle (2009) Fort Carson Site Manager, Continuing Education; BA, Eastern Illinois University; MA, Northwestern State University

Whatley, Nancy (1986) Assistant Director, TRiO Educational Opportunity Center; AS, Otero Junior College

Whitaker, Niki (2006) Marketing Communications Specialist, External Affairs; BS, Colorado State University-Pueblo

Wilkinson, Daren (2012) Football Offensive Coordinator, Athletics

Williams, Annie (1994) Director, Center for International Programs; BA, MBA, Colorado State University-Pueblo

Willis, Jordan (2011) Assistant Volleyball Coach, Athletics; BA, MA, St. Mary's College of California

Witkowsky, Patricia (2009) Interim Director, Student Development; BA, Occidental College; MA, University of Maryland; PhD., University of Northern Colorado

Wristen, John T. (2007) Head Coach Football, Athletics; BS, Colorado State University-Pueblo; MA, Adams State College

Yang, Sixian (2008) Institutional Research Analyst, Institutional Research and Analysis; BA, Peking University; MBA, Marquette University

Zaletel, Cora (2002) Executive Director, External Affairs; BS, MA, Emporia State University; Ph.D., ABD, University of Kansas

Zichterman, Jason (2011) Assistant Cross Country and Track Coach, Athletics; BA, Pacific University; MS, Chadron State College

Zinanti, Christie (2012) Head Softball Coach, Athletics; BS, Brigham Young University

## RANKED FACULTY

The following individuals were ranked faculty members in the 2013-2014 academic year. The date in parenthesis indicates the initial year of regular appointment to the ranked faculty.

Ahmadian, Ahmad (1985) Professor of Management; BA, Tehran University; MBA, Ph.D., North Texas State University

Allen, Beverly (2009) Associate Professor of Library Services; BA, MA, University of Missouri-St. Louis; MSLS, University of Illinois at Urbana-Champaign

Arnegard, Iver (2011) Assistant Professor of English; BA, University of Montana; MFA, University of Alaska-Fairbanks; Ph.D., Ohio University

Avińa, Maya (1995) Professor of Art; BA, Humboldt State University; MFA, University of California at Santa Barbara

Baca, Judy M. (1981) Associate Professor of Social Work; BS, Colorado State University-Pueblo; MSW, Arizona State University

Ball, James (2013) Assistant Professor of Exercise Science, Health Promotion, and Recreation; BS, MS, University of Wisconsin-La Crosse; Ph.D., Southern Illinois University

Barnett, Janet H. (1990) Professor of Mathematics; BS, Colorado State University; MA, Ph.D., University of Colorado

Bedoya-Valencia, Leonardo (2009) Assistant Professor of Engineering; BS, MS, National University of Colombia, Mines School, Medellin; Ph.D., Old Dominion University

Bencini, William K. (2010) Assistant Professor of Automotive Industry Management; AAS, John A. Logan Community College; BA, Monmouth College; MA, Northern Arizona University

Berardi, Gayle K. (1994) Professor of Political Science; BA, MA, University of Colorado at Colorado Springs; Ph.D., University of Colorado

Billington, Peter J. (1989) Professor of Management; BS, Worcester Polytechnic Institute; MBA, Northeastern University; Ph.D., Cornell University

Bonetti, Sandra J. (1991) Professor of Chemistry; BS, Ph.D., Georgia Institute of Technology

Bregar, Justin (2008) Assistant Professor of Mass Communications; BS, Colorado State University-Pueblo; MS, University of Colorado, Denver

Brennan, Ian (2003) Professor of Marketing; BA, University of Nottingham; MBA, University of Evansville; Ph.D., University of Texas-Arlington

Brett-Green, Barbara (2010). Assistant Professor of Psychology; BA, Rutgers University; MA, Ph.D., University of Colorado at Boulder

Bridgmon, Krista D. (2008) Associate Professor of Psychology; BS, MS, M.Ed., Ph.D., Northern Arizona University

Brown, William C. (2000) Associate Professor of Physics; BA, Wayne State University; MS, Ph.D., University of Colorado

Calhoun-Stuber, Susan (1994) Assistant Professor and Department Chair of Sociology and Anthropology; BA, Knox College; MA, Ph.D., University of Denver

Caprioglio, Daniel (1993) Professor of Biology; BA, University of California at Los Angeles; Ph.D., North Carolina State University

Caprioglio, Helen M. (1995) Associate Professor of Biology; BS, MS, Oregon State University; Ph.D., North Carolina State University

Carter, Colette (1994) Assistant Professor of Political Science and Chair of History/Political Science/Philosophy/ Geography Department; BA, Incarnate Word College; MA, Catholic University; Ph.D., University of Washington

Cerankowski, Leah (2007) Associate Professor of Nursing; BSN, St. Xavier College, Chicago; MSN, University of Colorado, Health Sciences Center

Chacon, Paul R. (1990) Professor of Mathematics; BS, University of British Columbia; Ph.D., University of Washington

Checho, Colleen M. (2010) Assistant Professor of Education; BS, University of Florida, MA, Saint Mary's College of California, Ph.D., University of Nevada, Reno

Chi, Jacob (1997) Professor of Music and Conductor of the Symphony; BA, Siena Heights College; MA, School of Music, University of Michigan; Ph.D., Michigan State University

Cho, Joey J. (2008) Associate Professor of Computer Information Systems; BCE, MCE, Chungbuk National University, Korea; BS, MCS, Ph.D., Utah State University

Clark, Laura (2002) Clinical Instructor of Athletic Training, EXHPR; BS, Pennsylvania State University; MS, University of Arizona

Clark, Roger (2002) Director of Athletic Training Education Program and Associate Professor, EXHPR; BS, University of Illinois; MS, University of Arizona; Ph.D., University of Pittsburgh
Cobián-Klein, Dora Luz (1995) Professor of Spanish; BA, MA, University of California at San Diego; Ph.D., University of California at Riverside

Conrad, Paul (2011) Assistant Professor of History; BA, Stony Brook University; MA, Ph.D., University of Texas at Austin

Conroy, Colleen (2001) Clinical Instructor of Athletic Training, EXHPR; BS, New Mexico State University; MSEd., Northwest Missouri State University

Cranswick, Matthew A. (2012) Assistant Professor of Chemistry; BS, Oregon State University; Ph.D., University of Arizona

Dallam, George (1999) Professor of Exercise Science, Health Promotion and Recreation; BS, MS, University of Arizona; Ph.D., University of New Mexico

Dalton, Dennis (1993) Professor of Art; BA, University of Toledo; MFA, University of Utah

DePalma, Jude (1997) Professor of Engineering; BSEE, University of Florida; MSEE, Purdue University; Ph.D., Colorado State University

DePalma, Ruth (1995) Undergraduate Nursing Program Coordinator and Associate Professor of Nursing; BSN, John Hopkins University; MSN, University of Florida

Diawara, Moussa (1993) Professor of Biology; BS, Institute Polytechnique Rural de Katibougeu, Mali, West Africa; MS, Ph.D., University of Georgia

Dillon, David (2005) Assistant Professor of Chemistry; BS, MS, East Texas State University; Ph.D., University of Wyoming

Druelinger, Melvin L. (1984) Professor of Chemistry; BS, Indiana University; Ph.D., University of Wisconsin

Duncan, Kevin C. (1994) Professor of Economics; BA, University of California at Riverside; Ph.D., University of Utah

Ebersole, Samuel (1990) Department Chair and Professor of Mass Communications; BA, Southern California College; MA, Ph.D., Regent University

Epps, Kristen (2010) Assistant Professor of History; BA, William Jewell College; MA, The College of William and Mary; Ph.D., University of Kansas

Eriksen, Scott (2005) Professor of Accounting; BS, University of Illinois; MS, Ph.D., University of North Texas

Eskew, Douglas (2008) Associate Professor of English; BA, MA, Ph.D., University of Texas-Austin

Farrer, Richard (2006) Associate Professor of Chemistry; BS, Aquinas College, Grand Rapids, Michigan; Ph.D., Boston College

Folkestad, William B. (2009) Associate Professor and Department Chair of Art; BA, Central Washington University; MA, Ph.D., University of Washington

Forsyth, Dan W. (1983) Professor of Anthropology; BA, University of California at Los Angeles; MA, University of Chicago; Ph.D., University of California at San Diego

Foust, Carol (2001) Professor and Department Chair of Exercise Science, Health Promotion, and Recreation; BS, MS, University of New Mexico; M.Ed., Lamar University; Ph.D., Texas A\&M University

Fowler, Karen L. (2008) Professor of Management, BS, Colorado State University-Pueblo; MBA, University of Wyoming; Ph.D., University of Nebraska-Lincoln

Franta, B. Joe (2007) Associate Professor of Nursing; BSN, Colorado State University-Pueblo; MSN, DNP, Beth-El College of Nursing and Health Sciences at UCCS

Fraser, Jane (1998) Professor and Department Chair, Engineering; BA, Swarthmore College; MS, Ph.D., University of California at Berkeley

Fronmueller, Julie (2007) Assistant Professor of Library Services; BA, MBA, Boise State University, MLIS, Louisiana State University

Fronmueller, Michael (2007) Professor of Management; MBA, Eastern Washington University; Ph.D., Washington State University

Funk-Neubauer, Darren (2007) Associate Professor of Mathematics; BS, University of Michigan-Dearborn; MA, Ph.D., University of Wisconsin-Madison

Furrh, Madison (2011) Assistant Professor of English; BA University of Texas; MA University of Nevada-Reno; Ph.D., University of Washington

Gabaldon, Annette (2004) Associate Professor of Biology; BS, New Mexico State University; Ph.D., University of California-Davis.

Gage, Scott (2011) Assistant Professor of English; BA, MFA, Louisiana State University; Ph.D., Florida State University

Gaughn, Judy (2012) Assistant Professor of History; BA, San Francisco State University; MA, Ph.D., University of California at Berkeley

Gilbreath, Brad (2008) Associate Professor of Management; BA, MBA, Baylor University; MS, Purdue University; Ph.D., New Mexico State University
Gomme, Ian (1995) Professor of Sociology; BA, University of Waterloo; B.Ed., Queen's University; M.Ed., University of Toronto; MA, University of Guelph; Ed.D, University of Toronto

Green, Pearl (Penny) (1982) Assistant Professor of Sociology; BA, City College of New York; MA, Ph.D., Southern Illinois University

Hanks, Sue (1994) Professor of Business Administration and Faculty Chair; BSE, MSE, Henderson State University; Ed.D., University of Arkansas

Hansen, Richard (1993) Professor of Art; BA, College of William and Mary; MLA, University of Colorado

Hansen, Victoria (1993) Professor of Art; BA, College of William and Mary; MFA, Kansas State University

Harris, Mathew L. (2005) Professor of History; BA, MA, Brigham Young University; M.Phil., Ph.D., Syracuse University

Hassan, Aun (2009) Associate Professor of Economics; BA, MA, Punjab University, Pakistan; Ph.D., Texas Tech University

Herrmann, Scott J. (1968) Professor of Biology; BS, Northern Illinois University; Ph.D., University of Colorado

Hostetter, Karen (2011) Assistant Professor/ATEP Clinical Education Coordinator of Exercise Science, Health Promotion and Recreation; BA, Seattle Pacific University; MS, California State University, Fullerton; Ph.D., University of Southern Mississippi

Hudock, Sandra (1997) Professor of Library Services; BA, Gordon College; MSLS, University of Kentucky; MA, Colorado State University

Hudson, Mark (2001) Professor of Music; BA, Harding University; MM, Ph.D., University of Florida

Huff, Richard A. (1997) Associate Professor, Computer Information Systems; BS, San Diego State University; MS, North Texas State University; Ph.D., University of North Texas

Hugger, Maria (2012) Assistant Professor of Library Services; BA, MA, University of Colorado; MLIS, University of Denver

Ihm, Dana E. (2005) Associate Professor of Music; BA, MM, Pittsburg State University; Ph.D., University of South Carolina

Jaksic, Nebojsa I. (2000) Professor of Engineering; BSEE, Belgrade University, Belgrade, Yugoslavia; MSEE, MSISE, Ph.D., Ohio State University

Johnson, Elizabeth (2001) Associate Professor of Art; BFA, MFA, Massachusetts College of Art

Johnson, Joel W. (2010) Assistant Professor of Political Science; BA, San Jose State University; MA, Ph.D., University of California, San Diego

Joo, Seong-Jong (2009) Associate Professor of Production and Operations Management; BS, Korea Air Force Academy, Seoul, Korea; MBA, Ph.D., Saint Louis University

Joyce, Richard (1995) Associate Professor of Mass Communications; BA, University of Scranton, Pennsylvania; BS, Colorado State University-Pueblo; MA, University of Colorado at Boulder

Kalevela, Sylvester A. (2005) Professor of Civil Engineering Technology and Department Chair; B.Sc.Eng., University of Dar-es-Salaam, Tanzania; MS, Virginia Polytechnic Institute and State University; Ph.D., Arizona State University

Kinney, Chad (2007) Associate Professor of Chemistry; BA, University of California at San Diego; Ph.D., Colorado School of Mines

Khosrowpour, Shahrzad (2008) Assistant Professor of Library Services; BS, Middle East Technical University/ Turkey; MSLIS, Texas Woman's University

Kleszynski, Margaret (2000) Associate Professor of Library Services; BA, Benedictine College; MLS, Kent State University; MS, University of Portland

Kwon, He-Boong (2012) Assistant Professor of Productions Operation Management; BS, Republic of Korea Air Force Academy; MS, Ph.D., Florida Institute of Technology; MBA, Pacific Lutheran University; Post-Doctoral Bridge Program, University of Toledo

Langer, Carol L. (2008) Associate Professor of Social Work; BA, Peru State College; MSW, University of NebraskaOmaha; Ph.D., University of Nebraska-Lincoln

Lehmpuhl, David (1998) Professor of Chemistry and Department Chair of Chemistry; BS, University of Colorado at Colorado Springs; Ph.D., University of Colorado at Boulder

Levy, Patricia (1991) Associate Professor of Psychology; BS, University of Bridgeport; MA, University of Colorado; Ph.D., Oklahoma State University

Liebel, Steven R. (2012) Assistant Professor of Political Science; BA, MA, Texas Tech University; Ph.D., University of North Texas

Lin, Wenshan (Jerry) (2011) Professor of Accounting; BBA, Tunghai University, China; MBA, University of Houston, Texas; Ph.D., University of North Texas
Loats, Carol (1993) Associate Professor of History; BA, College of Wooster; MA, University of Colorado; MA, University of Northern Colorado; Ph.D., University of Colorado

Long, Yuan (Yoanna) (2006) Associate Professor of Computer Information Systems; BS, China University of Geoscience; MS, East China Computer Institute; Ph.D., University of Nebraska-Lincoln

Louisell, James (1989) Professor of Mathematics; BS, Ph.D., University of Minnesota

Lovato, Samuel (2003) Associate Professor of Mass Communications; BS, Colorado State University-Pueblo; MA, University of Northern Colorado

Lucero, Nancy M. (2011) Assistant Professor of Social Work; BS, Metropolitan State College; MSW, Ph.D., University of Denver

Lundberg, Bruce (1993) Professor of Mathematics; BS, Grand Canyon University; MA, Arizona State University; MA, Fuller Theological Seminary; Ph.D., Colorado State University

Ma, James (2012) Assistant Professor of Computer Information Systems; BS, Peking University; MS, University of Texas at Dallas; Ph.D., University of Arizona

Martinez, Lee Anne (1992) Associate Professor of Biology; BA, University of California at Santa Barbara; MA, University of California at Santa Cruz; Ph.D., Cornell University
Massey, Margie (2000) Associate Professor of Education; AGS, Pueblo Community College; BSBA, Colorado State University-Pueblo; MS, Ed.D, University of Wyoming

McClaran, Steve (2008) Assistant Professor, EXHPR Department; BS, MA, University of Northern Colorado; MS, Colorado State University; Ph.D., University of Wisconsin

McGettigan, Timothy (2000) Professor of Sociology; BA, University of California, Santa Barbara; MA, Ph.D., Washington State University

Melnykov, Igor (2005) Associate Professor of Mathematics; BS, Kharkov State Polytechnic University, Kharkov, Ukraine; Ph.D., Bowling Green State University

Messer, Chris (2008) Associate Professor of Sociology; BA, MA, Ph.D., Oklahoma State University

Metchkov, Zahari (2010) Assistant Professor of Music; BM, MM, DMA, Cleveland Institute of Music

Mills, Alan W. (2008) Director of Bands and Assistant Professor of Music; BA, University of Minnesota-Morris; M.M.E., University of Colorado; M.M., University of Arizona, Ph.D., Florida State University
Mincic, Michael A. (2005) Associate Professor of Civil Engineering Technology; BSCET, Colorado State UniversityPueblo; M.Ed., Colorado State University; Colorado Professional Land Surveyor

Montoya, Fawn-Amber (2007) Associate Professor and Coordinator of Chicano/a Studies; BA, Brigham Young University; MA, Ph.D., University of Arizona

Montoya, Yvonne (2012) Assistant Professor of Speech Communication; BA, University of Colorado-Boulder; MA, University of Phoenix; Ph.D., Arizona State University

Morales, Juan (2007) Associate Professor of English and Director of Creative Writing; BA, Colorado State UniversityPueblo; MFA, University of New Mexico

Nichols, Janet G. (1977) Associate Professor of Mathematics; BA, Adelphi University; MS, Lehigh University

Norman, Steve (2008) Associate Professor of Management; BS, MBA, University of Colorado-Colorado Springs; Ph.D., University of Nebraska-Lincoln

O'Connor, John K. (2008) Assistant Professor of Philosophy; BA, Middle Tennessee State University; MA, Northern Illinois University; Ph.D., Boston College

Pardue, Karen (2005) Associate Professor of Library Services; BA, University of Colorado-Colorado Springs; MSLIS, University of Illinois at Urbana-Champaign

Paudel, Ananda (2011) Assistant Professor of Engineering; BE, Tribhuvan University, Nepal; MS, Gwangju Institute of Science and Technology, South Korea; Ph.D., Western Michigan University

Peters, Caroline (2006) Assistant Professor of Art; BFA, Northern Illinois University; MFA, University of Montana

Peters, Timothy W. (2005) Assistant Professor of Education; BA, Carleton College; MS, University of Michigan; Ed.D, University of Wyoming

Pettit, Sue L. (2005) Associate Professor of Education; BS, University of North Dakota; M.Ed., Ed.D, University of Northern lowa

Piazza, Jenny (1996) Associate Professor of Education; BA, Park College; MA, Adams State College; Ed.D., Oklahoma State University

Picicci, Chris L. (2008) Assistant Professor of Italian; BA, Gonzaga University; MA, Ph.D., University of Oregon

Piquette, Jeff (2005) Associate Professor of Education; BS, Colorado School of Mines; MA, Ph.D., University of Northern Colorado

Poritz, Jonathan (2007) Associate Professor of Mathematics; A.B., Harvard University, S.M., Ph.D., University of Chicago

Pratarelli, Marc E. (1999) Director of University Honors Program and Professor of Psychology; BA, University of California, San Diego; MA, Ph.D., University of Southern California

Rees, Jonathan (1999) Professor of History; BA, University of Pennsylvania; MA, Ph.D., University of Wisconsin-Madison

Regassa, Hailu (1989) Professor of Finance; BBA, Haile Selassie University, Ethiopia; MBA, Ph.D., University of Oregon

Reilly-Sandoval, Arlene (2004) Assistant Professor of Social Work; BA, University of Colorado-Colorado Springs; MSW, Colorado State University

Ribadeneira, Alegria (2006) Associate Professor of Spanish; BA, Fort Lewis College; MA, Ph.D., University of Florida, Gainesville

Richmond, Pam (2009) Assistant Professor of Social Work; BA, Saint Joseph College; MSW, University of WisconsinMilwaukee; Ph.D., Ohio State University

Robbe, Cathi J. (2006) Assistant Professor of Automotive Industry Management; BS, Colorado State University-Pueblo; MS, Capella University

Rochester, Christine (2000) Associate Professor of Exercise Science, Health Promotion, and Recreation; BS, Indiana University of Pennsylvania; MS, Canisius College; Ed.D., University of Northern Colorado

Rodríguez-Arenas, Flor María (1995) Professor of Spanish; Universidad Pedagógica Nacional, Bogotá, Licenciatura; Instituto Caro y Cuervo, Bogotá, Post graduate Studies; MA, University of Michigan, Ann Arbor; Ph.D., University of Texas at Austin

Rueda Mesa, Antonio (2012) Assistant Professor of Spanish; Licenciatura in Spanish Linguistics and Literature, Universidad de Sevilla, Spain; MA, University of Illinois, Urbana-Champaign; Ph.D., Tulane University

Samaras, Elizabeth (2009) Assistant Professor of Nursing; BFA, University of North Carolina at Chapel Hill; MSN, Yale University

San Nicolas-Rocca, Tonia (2012) Assistant Professor of Computer Information Systems; BA, MBA, California State University, San Bernardino; Ph.D., Claremont Graduate University

Sarper, Hüseyin (1988) Professor of Engineering; BS, The Pennsylvania State University; MS, Ph.D., Virginia Polytechnic Institute and State University

Seeber, Kevin (2011) Assistant Professor of Library Services; BA, MLIS, Florida State University

Shah, Abhay (1988) Professor of Marketing; BA, St. Xavier's College (Calcutta University); MBA, University of Evansville; Ph.D., Oklahoma State University

Smith, Jeff (2006) Associate Professor of Biology; BA, BS, University of Minnesota; Ph.D., University of New Mexico School of Medicine

Smith, Tyrell (2009) Assistant Professor of Automotive Industry Management; BS, MBA, Colorado State UniversityPueblo

Souder, Donna M. (2008) Associate Professor of English and Director of Writing; BS, MA, Texas A\&M UniversityTexarkana; Ph.D., Texas Women's University

Steffen, Leticia (2004) Associate Professor of Mass Communications; BA, Saint Louis University; MA, University of Denver

Taylor, Cynthia (1989) Associate Professor of English and Chair of the Department of English and Foreign Languages; BA, MA, University of Idaho; Ph.D., University of Minnesota

Taylor, Ted (1990) Assistant Professor of English; BA, MA, University of Idaho; Ph.D., University of Minnesota

Vance, Brigid E. (2012) Assistant Professor of History; BA, Carleton College; MA, Stanford University; MA, Ph.D., Princeton University

Vanden Heuvel, Brian D. (2004) Associate Professor of Biology and Department Chair; BS, Colorado State University; Ph.D., University of Texas at Austin

Wakefield, Michael (2000) Professor of Management; BA, MBA, New Mexico State University; Ph.D., University of Nebraska-Lincoln

Wallin, Marta J. (1987) Associate Professor of Physics; MS, Jagiellonian University, Krakow, Poland; Ph.D., University of Wyoming

Whited, Hsin-hui (2001) Associate Professor of Finance; BS, Soochow University; MA, Ph.D., The Claremont Graduate School

Williams, Susan (2009) Assistant Professor of Nursing; BSN, Colorado State University-Pueblo; MSN, Beth-El College of Nursing and Health Sciences at UCCS

Yescavage, Karen (1992) Associate Professor of Psychology; BS, Northwest Missouri State University; MA, Ph.D., University of North Carolina-Greenboro

Yuan, Ding (Elena) (2007) Associate Professor of Engineering; Bachelor of Engineering, Dalian University of Technology, P.R. China; Ph.D., New Jersey Institute of Technology

Zizza, Frank (2009) Professor of Mathematics and Department Chair; BS, CUNY Queens College; Ph.D., University of California, Berkeley

## LECTURERS

Brown, Paul (2011) Lecturer of Biology; BA, Earlham College; MS, Purdue University; MS, Washington University, St. Louis

Collie, Gillian (2008) Lecturer of English; BA, University of Washington; BS, University of Iowa; MBA, MA, Colorado State University-Pueblo

Dehdouh, Audrey (2011) Lecturer of Foreign Languages; BA, MA, Universite de Caen; M.Ed. Carthage College

Gylling, John (2008) Lecturer of Spanish; BA, MA, Adams State College

Hawthorne, James (2005) Lecturer of English; BA, University of Kansas; MA, State University of New York at Stony Brook

Heedt, Dorothy (2009) Lecturer of English; BA, MA, Colorado State University-Pueblo

Iberri-Shea, Daniel. (2012) Lecturer of Speech Communication; BS, MA, Professional Writing Certificate, Northern Arizona University

Johnston, Tatiana (2007) Lecturer of Spanish; BA, MBA, DeVry University

Little, Constance (2008) Lecturer of English; BA, Western State College; MA, Colorado State University

Martinez, Wayne C. (2006) Lecturer of Computer Information Systems; BS, MBA, Colorado State University-Pueblo

Saphara, Jason (2002) Lecturer of English; BA, Colorado State University-Pueblo; MA, Kansas State University

Stroud, Jacqueline (2008) Lecturer of History; BA, Colorado State University-Pueblo; MA, University of Texas at El Paso; ABD., Texas Christian University

Sundermann, Isaac (2009) Lecturer of English; BA, University of Nebraska-Lincoln; MA, Colorado State University-Pueblo

Vidmar, Shawn (2008) Lecturer of English; BA, University of Denver; MA, Colorado State University

Watkins, Tamara (1998) Lecturer of Mathematics; BA, Colorado School of Mines; MSANS, Colorado State University-Pueblo

Whited, William Scott (2001) Lecturer of English; BA, University of Iowa; MA, University of California-Irvine; MFA, University of New Orleans

Wink, Geri (2004) Lecturer of Accounting; BBA, MBA, Sam Houston State University

## ARTISTS-IN-RESIDENCE

Beck, Barbara (2000) Artist-in-Residence, Music; BA, University of Colorado; MM, Colorado State University; MM, University of Northern Colorado

De Luca, Mike (2006) Artist-in-Residence, Music; BA Colorado State University-Pueblo; MA, University of Colorado

Eastin, Charles Brad (2005) Artist-in-Residence, Music; BA, MM, University of South Florida

Eberhardt, Allan R. (1999) Artist-in-Residence, Music; BA, University of New Mexico; Graduate USAF NCO Academy

Turner, Aaron (2005) Artist-in-Residence; Music; BM, Lawrence University; MM, University of North Texas

## EMERITUS FACULTY

Abrahamson, Gayle (1985-2008) AA, BA, MAR, MA, Professor Emeritus of Library Services

Aguilar, Kay M. (1964-1999) BS, MA, Ed.D., Professor Emerita of Exercise Science and Health Promotion

Aichele, Ronald G. (1972-2006) BA, MA, Ph.D., Professor Emeritus of Philosophy

Allen, Ernest E., (1963-2002) BS, MA, MATM, Ed.D., Dean Emeritus of the College of Science and Mathematics and Professor Emeritus of Mathematics

Anderson, Deyrol E. (1983-2002) BA, MA, Ph.D., Professor Emeritus of Mass Communications

Anderson, Norris D. (1965-1984) BA, MA, Ed.D., Professor Emeritus of Education

Askwig, William J. (1962-1994) BSBA, MBA, Ph.D., Professor Emeritus of Economics

Baldauf, Boyd J. (1964-1988) BS, MA, Ed.D., Professor Emeritus of Computer Science Technology

Banks, Jessie (1966-1996) BS, MA, Professor Emeritus of Human Performance and Leisure Studies

Barber, Margaret (1995-2009) BA, MA, Ph.D., Professor Emerita of English

Bartlett, Thomas J. (1967-1977) BS, MA, Professor Emeritus of Mathematics

Bassein, Beth Ann (1966-1991) BA, MA, Ph.D., Professor Emerita of English and Speech Communication

Benton, Johnny (1968-1996) BA, MA, Ph.D., Professor Emeritus of Speech Communication

Blandford, Robert D. (1965-1989) BS, MA, DA, Professor Emeritus of Mathematics

Borton, John M. (1983-2009) BA, MS, Ph.D., Professor Emeritus of Computer Information Systems

Bory, Rosanne (1984-2008) BA, MA, MA, Professor Emerita of Library Services

Bottini, Patrick W. (1968-1999) BS, MA, Professor Emeritus of Industrial Science and Technology

Bradley, Lawrence B. (1966-1988) BA, MA, Professor Emeritus of Speech Communication/Theater

Brassill, Joann A. (1967-1987) BA, MA, MFA, Professor Emerita of Art

Bright, Leon A. (1963-1995) BS, MA, Ph.D., Professor Emeritus of Foreign Language

Browne, James H. (1991-2007) AA, BA, MA, Ph.D., Professor Emeritus of Management

Cain, Robert L. (1970-1993) BA, MLS, Professor Emeritus of Library Services

Cameron, James (1970-2003) BA, MA, Ph.D., Professor Emeritus of Psychology

Chen, Frank (1982-2005) BSME, MSME, Ph.D., Professor Emeritus of Mechanical Engineering Technology

Cheng, Joseph K. (1973-2005) BS, MS, Ph.D., Professor Emeritus of Civil Engineering Technology

Connelly, Jerald (1979-1990) BS, Ph.D., Professor Emeritus of Chemistry

Cook, Robert N. (1981-1999) BEE, MSE, M.SC., Ph.D., Professor Emeritus of Computer Information Systems

Cotner, Jane (1960-1976) AB, BSLS, Professor Emerita of Library Sciences

Covi, Silvio (1986-2008) B.Th., MA, Ph.D., Professor Emeritus, of English/Foreign Languages

Croxton, Carol (1978-1994) BA, MA, Ph.D., Professor Emerita of English

Davison, Earl (1950-1975) BS, Professor Emeritus of Industrial Technology

Derr, James, B. (1984-2007) BA, Ph.D., Professor Emeritus of Mathematics

Dhatt, Yashwant S. (1983-2003) B.Comm, MA, MBA, Ph.D., Professor Emeritus of Finance

Dille, Ralph (1976-1996) BA, BS, MA, Ph.D., Professor Emeritus of English

Dorsch, John A. (1965-2003) BA, MS, Ph.D., Professor Emeritus of Biology

Driscoll, Donald J. (1965-2001) BA, MA, Ph.D., Professor Emeritus of Philosophy

Eisenbeis, Richard H. (1988-2005) BA, MS, Ph.D., Professor Emeritus of Management

Farley, Mary (1991-1996) BSN, MS, Ph.D., Professor Emerita of Nursing

Farwell, Hermon W. (1966-1984) AB, MA, Professor Emeritus of Speech Communication

Fouts, Kenneth B. (1962-1985) AA, BFA, MA, Ph.D., Professor Emeritus of Speech Communication

Gill, John (1971-1999) BS, MA, Ph.D., Professor Emeritus of Mathematics

Hammer, Charles R. (1964-1995) BS, Ph.D., Professor Emeritus of Chemistry

Hench, Robert W. (1965-1993) BFA, MA, Professor Emeritus of Art

Hobbs, Harold C. (1966-1984) BA, MA, Ph.D., Professor Emeritus of Psychology

Ihrig, Paul R. (1946-1971) BS, MA, Professor Emeritus of Fine Arts

Janes, Donald W. (1963-1993) BA, MA, Ph.D., Professor Emeritus of Biology

Jensen, Carl G. (1970-2004) BS, MAT, MFA, Professor Emeritus of Art

Keller, Robert L. (1974-2005) BA, MS, Ph.D., Professor Emeritus of Sociology

Kent, (Kahn) Theodore C. (1965-1978) BA, MA, Ph.D., Sc.D., Professor Emeritus of Behavioral Science

Knight, Douglas W. (1980-2003) BS, MS, Ph.D.; Professor Emeritus of Computer Information Systems

Knight, Shirley (1972-2000) AA, BSCE, MSCE, Professor Emerita of Civil Engineering Technology

Krinsky, Richard (1968-2005) BA, MA, Ph.D., Professor Emeritus of Psychology

Krinsky, Suzanne G. (1968-2005) BA, MA, Ph.D., Professor Emerita of Psychology

Kulkosky, Paul J. (1984-2010) BA, MA, Ph.D., Professor Emeritus of Psychology

Kuntzman, Ann (1993-2002) BA, MLS, Professor Emerita of Library Services

Li, Hung C. (1965-1990) BA, MS, Ph.D., Professor Emeritus of Mathematics

Linam, Jay (1965-1991) BS, MS, Ph.D., Professor Emeritus of Biology

Mahan, Kent (1969-1997) BS, Ph.D., Professor Emeritus of Chemistry

Marino, Charles J. (1966-1999) BA, BFA, MA, Professor Emeritus of Art

Markowski, Victoria (1969-1999) BM, Professor Emerita of Music

Martinet, Anthony (1969-1990) BS, M.Ed., Professor Emeritus of Automotive Parts and Service Management

Massey, Frank A. (1963-2003) BIE, BBA, MS MFA, Ph.D., Professor Emeritus of Engineering

McCanne, Roy (1974-1994) BA, MA, Ed.D., Professor Emeritus of Education

Meyer, Russell J. (2000-2011) BA, MA, Ph.D., Professor Emeritus of English

Miller, Glenn W. (1974-2003) BA, MA, Professor Emeritus of Mass Communication

Miller, Margaret (1976-1990) BA, MS, Ph.D., Professor Emerita of Teacher Education

Miller, Robert E. (1952-1983) BS, MS, Professor Emeritus of Chemistry

Miller, Wilbur C. (1967-1988) BA, MBS, Ph.D., Professor Emeritus of Mathematics

Milne, Donald C. (1965-1993) BA, MA, Ph.D., Professor Emeritus of English/Foreign Languages

Mo, Suchoon S. (1973-2002) BS, Ph.D., Professor Emeritus of Psychology

Moffeit, Tony (1976-2003) BS, MLS, Professor Emeritus of Library Science

Montgomery-Ratcliff, Barbara M. (2001-2012) BS, MA, Ph.D., Professor Emerita of Speech

Moore, Beverly (1970-2001) AA, BA, MA, Dean Emerita, University Library and Professor Emerita of Library Services

Morales, Heberto (1987-1999) Ph.D., Professor Emeritus of Foreign Language

Muller, Doyle K. (1963-1999) BM, BA, Professor Emeritus of Music

Murray, Hallard (1969-1997) Professor Emeritus of Biology
Nicholl, Larimore R. (1968-2003) BA, MA, Professor Emeritus of Philosophy

O'Leary, Emmett (1972-2005) BA, MA, Ph.D., Professor Emeritus of Speech Communication

Olin, Carol M. (1971-1991) BA, MA, Professor Emerita of English

Orman, Patricia (1978-2010) BA, MA, Ph.D., Professor Emerita of Mass Communications

Osborn, Neal L. (1965-2004) BA, BA, MS, Ph.D., Professor Emeritus of Biology

Padgett, John J. (1967-1999) BS, MBA, Professor Emeritus of Computer Information Systems

Pavlik, Richard E. (1963-2001) BS, MA, Professor Emeritus of Mass Communications

Perkins, David M. (1978-1995) BSEE, MSEE, Professor Emeritus of Electronics Engineering Technology

Phillips, David L. (1971-1995) BS, MS, Ph.D., Professor Emeritus of Mathematics

Plonkey, Kenneth (1968-1998) BA, MA, Ph.D., Professor Emeritus of Theatre

Post-Gorden, Joan C. (1970-1999) BS, MS, Ph.D., Professor Emerita of Psychology

Reiff, Glenn A. (1978-1989) BS, MS, Professor Emeritus of Electronics Engineering Technology

Reinier, Edward R. (1964-1988) BS, MA, Professor Emeritus of Management

Ryan, John E. (1980-2012) BA, MA, Ph.D., Professor Emeritus of Education

Sabo, Barbara J. (1974-2004) RN, AA, BS, MS, Ph.D., Professor Emerita of Nursing

Sadler, George (1965-1987) BS, MS, Ph.D., Professor Emeritus of Economics

Sajbel, Edward (1955-1989) AA, BA, MA, Professor Emeritus of Art

Sandoval, David A. (1980-2011) BS, MA, Ph.D., Professor Emeritus of History

Sauer, Wolfgang (1993-2007) Diplom Ingenieur, Ph.D., Professor Emeritus of Mechanical Engineering

Seilheimer, Jack A. (1964-2012) BS, Ph.D., Professor Emeritus of Biology

Senatore, Margaret L. (1964-2003) BA, MA, Professor Emerita of English

Sheidley, William E. (1994-2008) BA, MA, Ph.D., Professor Emeritus of English/Foreign Languages

Sherman, John R. (1971-2005) BA, MA, Ph.D., Professor Emeritus of Speech Communication

Shih, Tsang Yu (Tom) (1964-1984) BSM, Professor Emeritus of Metallurgical Engineering Technology

Shirley, Robert C. (1984-1996) BA, MA, Ph.D., President Emeritus and Professor Emeritus of Management

Simms, Houston C. (1947-1975) BA, MA, Professor Emeritus of Biology

Sisson, Ray (1960-1996) AA, BSEE, MSEE, Ed.D., Professor Emeritus of Engineering and Dean Emeritus of the College of Applied Science and Engineering Technology

Smith, John E. (1962-1989) AA, BA, Ph.D., Professor Emeritus of Chemistry

Smith, Robert (1969-1996) BA, MA, Professor Emeritus of Computer Information Systems

Socha, Frances J. (1967-1982) BSN, MA, Professor Emerita of Nursing

Solis, Jose (1963-1996) BS, MSW, Professor Emeritus of Social Work

Spenny, David L. (1980-2004) BS, Ph.D., Professor Emeritus of Physics

Steen, Melva (1992-2001) BSN, MA, Professor Emerita of Nursing

Stjernholm, Kirstine (19671995) BA, MA, Professor Emerita of Library Services

Strobel, John D. (1960-1993) BME, MM, DMA, Professor Emeritus of Music

Stutters, Donald G. (1960-1992) BA, MA, Ed.D., Professor Emeritus of Human Performance and Leisure Studies

Sublette, James E. (1984-1995) BS, MS, Ph.D., Professor Emeritus of Biology

Sullivan, Daniel R. (1970-2012) BA, MLS, Professor of Library Services

Sweet, Jerry (1969-1999) AAS, BSMET, MS, Ph.D., Professor Emeritus of Mechanical Engineering Technology

Tedrow, Charles E. (1968-1993) AB, MA, Professor Emeritus of Industrial Science Technology

Townley, Rodney D. (1945-1978) M.Mus.Ed., Professor Emeritus of Music

Valerio, Luis G. (1975-2005) BA, MA, Ph.D., Professor Emeritus of Teacher Education

Vorndam, Paul E. (1994-2005) BA, MS, Ph.D., Professor Emeritus of Chemistry

Vunovich, Bogdan (Bob) (1967-1988) AB, MA, Professor Emeritus of Mathematics

Wack, Dunstan J. (1969-1982) BS, MA, Ph.D., Professor Emeritus of Psychology
Wands, Robert (1963-1996) BFA, MA, Professor Emeritus of Art

Warfield, Dale E. (1971-1995) AA, BEE, MSEE, Professor Emeritus of Electrical Engineering Technology

Watkins, Sallie A. (1966-1988) BS, MS, Ph.D., Professor Emerita of Physics

Weinhouse, Donald S. (1991-2005) BA, MA, M.Ed., Ph.D., Professor Emeritus of Teacher Education

Whitmer, Jean J. (1970-1987) BA, MA, Ph.D., Professor Emerita of Education

Whitsitt, Ronald G. (1959-1989) BA, MA, Professor Emeritus of English

Wilkin, Ted (1999) Professor Emeritus of History
Wilkes, Linda M. (1983-2011) BA, Ph.D., Professor Emerita of Chemistry

Williams, Euphemia G. (1995-2002) BS, MS, Ph.D., Professor Emerita of Nursing

Withnell, Melvin C. (1967-1994) BS, MS, MA, Ph.D., Professor Emeritus of Mathematics

Wright, Will (1986-2008) BA, MA, Ph.D., Professor Emeritus of Sociology

Zeis, Charles (1987-2010) BA, MS, Ph.D., Professor Emeritus of Business Administration

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[^0]:    Colorado State University-Pueblo is an affirmative action/equal opportunity employer and complies with all Federal and Colorado State laws, regulations, and executive orders regarding affirmative action requirements in all programs. Colorado State University-Pueblo does not discriminate on the basis of race, color, religion, age, sex, national origin, disability, veterans, or sexual orientation in employment or provision of services. The Office of Affirmative Action is located in the Administration Building Room 311, to assist CSU-Pueblo staff, faculty and students in affirmative action matters. Inquiries or appointments can be made by phone at (719) 549-2210 or by stopping by the office.

[^1]:    * Students may only enroll for a total of 6 credit hours of CHEM 599, Thesis Research.

[^2]:    ** ECON 201 and 202 are also counting for the Social Science General Education Requirement.

