## CSU


$2009-2010_{\text {Catalog }}$

# UNIVERSITY CALENDAR 2009-2010 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.colostate-pueblo.edu prior to the beginning of each semester.

## FALL <br> 2009

Graduation Planning Sheets Due .Jan. 30 (09)

Registration Begins .........................................March 9
New First-Year Student Orientation and Advisement/Registration

Aug. 14
New First-Year Student Orientation and
Advisement/Registration ........................................................................................
End Drop/Add. . Sept. 7
End of Course Withdrawal Period .................... Oct. 23
Thanksgiving Break.................................. Nov. 23-27
Classes End ...................................................... Dec. 4
Final Exams ................................................. Dec. 7-11
SPRING ..... 2010
Graduation Planning Sheets Due Sept. 11 (09)
Registration Begins Oct. 19 (09)
New First-Year Student Orientation and Advisement/Registration ..... Jan. 7
Classes Begin ..... Jan. 11
End Drop/Add ..... Jan. 25
End of Course Withdrawal Period ..... March 12
Spring Break ..... March 22-26
Classes End ..... April 23
Final Exams April 26-30
Commencement ..... May 1

Note: These Calendars are planned in advance and are subject to change.

## SUMMER COLLEGE

Summer College consists of multiple sessions. Specific information about Summer College is available in the Semester Notes posted on our University web site at http://www.colostate-pueblo.edu prior to the beginning of the first session.

SUMMER
$\underline{2010}$
Graduation Planning Sheets Due Jan. 29 (10)

Registration Begins
March 8
First 4, 6 and 12-week Sessions
Classes Begin ................................................... May 10
End Drop/Add
(First 4-week).............................................. May 12
(First 6-week).............................................. May 14
(12-week)................................................... May 20
Memorial Day (University Closed)...............May 31 (M)
End Course Withdrawal Period
(First 4-week)............................................... May 21
(First 6-week)................................................June 4
(12-week)...................................................June 25
Classes End
(First 4-week)................................................June 3
(First 6-week).............................................June 17
(12-week)..................................................... July 29

## Second 4-week Session

Classes Begin ...................................................June 7
End Drop/Add.....................................................June 9
End Course Withdrawal Period ........................June 18
Classes End...................................................... July 1

## Second 6-week Session

Classes Begin ..................................................June 21
End Drop/Add..................................................June 25
End Course Withdrawal Period ........................ July 16
Classes End.................................................... July 29
Third 4-week Session
Independence Day Holiday Observed
(University Closed)..................................... July 5 (M)
Classes Begin ..................................................... July 6
End Drop/Add...................................................... July 8
End Course Withdrawal Period ........................ July 16
Classes End..................................................... July 29

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

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

## 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 admissions office in advance of your visit: (719) 549-2462.



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## NOTE: 549- IS THE PREFIX FOR ALL NUMBERS

Any exceptions to the 549 prefix will be noted.

## TROUBLE-SHOOTING NUMBERS

## IF YOU NEED HELP WITH:

access to a computer ................................................. 2002
money to stay in school........................2753, 2967 or 2980
grades/need a tutor ..................................................... 2581
residence hall programs ............................................... 2601
residence hall repairs ................................................... 2601
someone harassing you .............................................. 2373
meals........................................................................... 2831
deputy sheriff conduct .................................................. 2373
interpersonal relations with another student................. 2569
interpersonal relations with a faculty or
staff member ................ Appropriate Department Chair
day care availability ..................................................... 2407
joining or starting a student organization..................... 2151
IF YOU ARE CONSIDERING:
withdrawing for academic reasons .............................. 2523
withdrawing from one or more courses ....................... 2462
changing majors........................ Academic Advisor or 2462
an on-campus job......................................................... 2369
an off-campus job......................................................... 2980

## IF YOU DON'T KNOW:

your advisor.
Academic Department or 2581
where to get an ID card................................................ 2161
how to hold a campus function........................ 2151 or 2161
how to handle a racial or sexual discrimination........... 2092
where and how you can post signs and messages............................................2149/2810
how to use the recreation facilities
(pool, Rec. field, gym, etc.)
2085
how to schedule the challenge ropes course .............. 2023
what clubs are seeking members................................ 2151
how to create your resume or get an internship .......... 2980
what student organization and activities are
available this week........................................ 2550

IF YOU NEED FINANCIAL AID INFORMATION:
Student Financial Services.......................................... 2753

GRAMMAR HOTLINE ..........................................549-2787
INFORMATION (GENERAL) ...................................... 2100

## FREQUENTLY CALLED OFFICE LISTINGS

## A

Academic Affairs ..... 2313
Academic Advising (see Student Academic Services). ..... 2581
Accounting Department (Academic) ..... 2142
Accounting Services ..... 2753
Admissions ..... 2462
Aerobics ..... 2703
Affirmative Action ..... 2092
Alcohol and other Drug Education. ..... 2092
Alumni ..... 2858
Archives ..... 2475/2685
Army ROTC ..... 2163
Art Department ..... 2835
Associated Students' Government ..... 2866
Athletic Trainer ..... 2431
Athletics ..... 2711
Auditor. ..... 2133
Automotive Industry Management Department. ..... 2890
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Baseball ..... 2065
Basketball
Men's ..... 2713
Women's ..... 2382
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Cashier ..... 2131
Catering ..... 2922
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Ft. Carson Office ..... 526-2509
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Dean ..... 2361
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Periodicals ..... 2396
Reference ..... 2333/2451
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Mail Services/Shipping and Receiving ..... 2846/2299
Maintenance ..... 2211
Massari Arena (Athletics) ..... 2711
Mass Communications Department ..... 2835
Math Learning Center ..... 2189
Mathematics/Physics Department. ..... 2433
Military Science ..... 2163
Multicultural Center ..... 2627
Music Department ..... 2552
National Test-Site Services ..... 2172
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Non-Traditional Student Services ..... 2151
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Perkins Loans ..... 2937
Physical Plant
Office.. ..... 2211
Custodians ..... 2400
Grounds ..... 2206
Shipping and Receiving/Mail Services ..... 2299/2846
After Hours Emergencies ..... 583-6250
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Track and Field ..... 2072
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Track and Field ..... 2072
Training Room ..... 2431
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Veterans' Educational Benefits ..... 2910
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Pikes Peak Community College ..... 719-502-4545
Pueblo Community College ..... 549-3077
Video-Media Services ..... 2566
Visitor \& Transfer Center ..... 2418
Volleyball ..... 2012
W
Women's Studies (Academic) ..... 2811
Wrestling ..... 2794
Writing Room ..... 2901

## 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

Automotive Industry Management ..... BS
Civil Engineering Technology ..... BSCET
Education ..... M.Ed.
Engineering with a Specialization in Mechatronics ..... BSE
Exercise Science, Health Promotion, and Recreation ..... BS
Industrial Engineering ..... BSIE
Industrial and Systems Engineering ..... MS
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)
Elementary Education (K-6)
English (7-12)
Foreign Languages (Spanish 7-12)
Linguistically Diverse
(Requires an initial teaching license)

Mathematics (7-12)
Music (K-12)
Physical Education (K-12)
Science (7-12)
Social Studies (7-12)

## COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

$\qquad$
Art.
BA, BFA
English ............................................................................................................................................................................ BA
Foreign Language-Spanish .................................................................................................................................................. BA
History ...................................................................................................................................................................BA, BS, M.A.
Liberal Studies .......................................................................................................................................................................... BS
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

Applied Natural Science ..... MS
3+2 Joint Degree Program ..... BS + MS
Biology ..... BS
Chemistry ..... BS
Mathematics ..... BA, BS
Physics ..... BS

## HASAN SCHOOL OF BUSINESS

Accounting ..... BSBA
Business Administration ..... MBA
3+2 Joint Degree Program - Computer Information Systems ..... $B S+M B A$
3+2 Joint Degree Program - Management ..... $B S B A+M B A$
Business Management ..... BSBA
Computer Information Systems ..... BS
Economics ..... BSBA
CONSORTIUM PROGRAM
Colorado State University-Pueblo also offers the following program through special consortium agreements with ColoradoState University (Fort Collins).
English (degree awarded thru Colorado State University-Fort Collins) ..... M.A.
ALPHABETICAL LIST OF UNDERGRADUATE MAJORS/EMPHASIS AREAS
The following is an alphabetical list of undergraduate majors and their emphasis areas that are available at Colorado State
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Biology Secondary Certification Emphasis BS ..... 165
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Pre-Optometric
Pre-Pharmacy
Pre-Physical Therapy
Pre-Physician Assistant
Pre-Podiatric Medicine
Pre-Veterinary Medicine
Cellular and Molecular Biosciences Emphasis Areas (see below) ..... BS ..... 164
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Medical Technology
Environmental Biosciences Emphasis Areas (see below). ..... BS ..... 163
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Environmental Technology
Pre-Ecology
Pre-Forestry/Wildlife
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Information Technology Emphasis ..... BSBA ..... 181
Marketing Emphasis. BSBA. ..... 182
Chemistry BS ..... 167
ACS Certified Emphasis BS ..... 167
Biochemistry Emphasis .BS ..... 168
Pre-Medicine Emphasis .BS ..... 169
Pre-Pharmacy Emphasis BS ..... 169
Pre-Veterinary Emphasis BS ..... 169
Secondary Teaching Certification Emphasis. BS ..... 168
Civil Engineering Technology .BSCET ..... 93
Computer Information Systems .BS ..... 183
Economics BSBA ..... 185
Engineering with a Specialization in Mechatronics BSE ..... 95
English BA ..... 128
Creative Writing Emphasis BA ..... 128
Secondary Teaching Endorsement Emphasis BA ..... 129
Exercise Science, Health Promotion, and Recreation ..... 100
Athletic Training Emphasis ..... 102
Community/Commercial Recreation Emphasis ..... 108
General Exercise Science Emphasis ..... 103
Health Promotion/Wellness Emphasis ..... 104
Outdoor Leadership Emphasis ..... 107
Physical Education K-12 Teacher Preparation Emphasis . ..... 105
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History BA, BS ..... 133
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Industrial Engineering BSIE ..... 98
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Biophysics Emphasis ..... 174
Chemical Emphasis ..... 174
Engineering Emphasis ..... 174
Physical Science Secondary Certification Emphasis ..... 175
Physics Secondary Certification Emphasis ..... 174
Political Science ..... 135
American Political Institutions and Politics Emphasis ..... 136
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Public Administration and Public Policy Emphasis ..... 135
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Graduate Major/Emphasis Area DegreeApplied Natural Science ...........................................................................................MS70
Biochemical Sciences Emphasis ..... MS ..... 71
Biological Sciences Emphasis ..... MS ..... 71
Chemical Sciences Emphasis MS ..... 71
3+2 Joint Degree Program BS + MS ..... 72, 161
Business Administration MBA. ..... 72
3+2 Joint Degree Program - Computer Information Systems. BS + MBA ..... 74, 187
3+2 Joint Degree Program - Management BSBA + MBA ..... 74, 186
Education M.Ed. ..... 74
Art Education Emphasis .M.Ed ..... 76
Foreign Language Emphasis .M.Ed ..... 76
Health \& Physical Education Emphasis .M.Ed ..... 77
Instructional Technology Emphasis .M.Ed. ..... 77
Linguistically Diverse Education Emphasis M.Ed. ..... 77
Music Education Emphasis M.Ed. ..... 77, 148
Special Education Emphasis M.Ed. ..... 77
English (degree awarded thru CSU-Fort Collins) M.A. ..... 78
History M.A. ..... 88
General History Emphasis .M.A. ..... 89
Public History M.A. ..... 89
Teaching Emphasis. M. A. ..... 89
Industrial and Systems Engineering ..... MS ..... 79
Nursing ..... 82
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Adult Acute Care Nurse Practitioner Emphasis. ..... 86
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Biology ..... 165
Business Administration ..... 182
Chemistry ..... 169
Chicano Studies ..... 126
Coaching ..... 106
Computational Mathematics ..... 171
Computer Information Systems ..... 184
Computer Security ..... 184
Creative Writing. ..... 129
Economics ..... 186
Education ..... 138
Engineering ..... 99
English ..... 127
Exercise Science and Health Promotion ..... 106
Fitness and Recreational Sports Management ..... 106
Forensic Science ..... 169
French ..... 132
History ..... 134
Industrial Engineering. ..... 99
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Leadership Studies ..... 59
Marketing ..... 182
Mass Communications ..... 143
Mathematics ..... 171
Military Science (ROTC Program) ..... 144
Music. ..... 148
Non-Profit Administration ..... 148
Non-Profit Management ..... 182
Philosophy ..... 137
Physical Science ..... 175
Physics ..... 175
Political Science ..... 136
Professional Biology ..... 165
Professional Writing ..... 130
Psychology ..... 151
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## THE UNIVERSITY

## HISTORY

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

1933<br>1934-37<br>1937-61<br>1961-75<br>1975-June 30, 2003<br>July 1, 2003-Present<br>San Isabel Junior College<br>Southern Colorado Junior College<br>Pueblo Junior College<br>Southern Colorado State College<br>University of Southern Colorado<br>Colorado State University-Pueblo

During its 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 selected masters level graduate programs. (Colorado Statutes 23-55-101)

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). In collaboration with CSU in Fort Collins, CSUPueblo also offers the masters degree in English and new masters' programs are currently under development.

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 suppost 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 4,400-plus 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 Life, 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.

Our campus housing options are growing and improving every day. Belmont Residence Hall houses nearly 500 students in three wings that are joined by a large commons area that includes an indoor basketball court, laundry facilities and computer labs. The University Village at Walking Stick is an on-campus apartment community for sophomores, juniors, and seniors. New residence halls with suite style rooms are under construction and the first new building, with 250 student beds, will be open for the Fall 2009 semester. Two new residence halls with additional 500 beds will also be completed by the beginning of the 2010 academic year.

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 the Accreditation Board for Engineering and Technology (ABET); industrial 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 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 Diversity, Colorado State University-Pueblo, 2200 Bonforte Boulevard, Pueblo, Colorado, 81001-4901, Phone (719) 549-2092 or the Office of Civil Rights (OCR) Department of Education, Colonnade Center, 1244 Speer Blvd., Denver, CO 80204-3582. 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) 5492441.

## EMERGENCY PLANNING AND NOTIFICATION

The University is committed to a safe and secure environment for its students, faculty and staff. Fully certified law enforcement officers from the Pueblo County Sheriff's Office operate out of a substation located on campus and provide 24 hour a day, seven day a week coverage. In addition, we have recently installed in all buildings on campus a voice over intercom system from which the law enforcement personnel can broadcast alerts, information, and directions to all individuals on campus in the event of any emergency.

## EMERGENCY CLOSURE POLICY

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 Emergency Closure Policy (ECP) will be followed in all CSU-Pueblo emergency closure situations. The emergency closure procedures are as follows:

1. The emergency closure process will be initiated by the Pueblo County Sheriff's Office substation on campus.
2. The Pueblo County Sheriff's Office will contact appropriate internal and external departments and agencies for input regarding the decision-making process.
3. The Pueblo County Sheriff's Office will provide by 5:45 a.m. to the Vice President for Finance and Administration a verbal report, including a general review of conditions, impending developments, and a recommendation for action. The Vice President for Finance and Administration will notify the President, who will make all closure decisions.
4. The Pueblo County Sheriff's Office will notify by telephone persons designated as having individual building responsibilities for any official closure. If necessary, a police officer will be dispatched to individual buildings to insure proper and complete notification.
5. 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.
6. Unless instructed otherwise, all designated essential personnel (e.g., BRH, food service, Sheriff's Office and physical plant, environmental health and safety, and auxiliary service units) will report to work.
7. All other employees will be notified by their supervisors whether or not to report (i.e., vice presidents will notify deans and directors, who in turn will notify department heads, and/or office managers, who in turn will notify faculty, classified staff and work study students in their respective areas). Those responsible for telephoning others, will have available at all times an updated list of their contacts' home telephone numbers.
8. Employees who have not received direct notification within a reasonable amount of time should contact their supervisors if unsure about whether to report.
9. 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 of View Current Info. If the University is closed, a message also will be posted on the University's home page. Closure notification also will include the Pueblo Transportation Company and any non-law enforcement organizations that are appropriate.
10. Closure decisions impacting on-campus and offcampus evening classes (i.e., Colorado Springs and Canon City) should be made by 3 p.m.
11. Despite improving conditions, any decisions for closure will remain in effect for the period of time originally specified.

## 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.

Colorado State University-Pueblo welcomes applications from all persons interested in post-secondary education. The Office of Admissions is located in the Administration building. Prospective students may obtain information about all CSU-Pueblo programs, as well as University admission procedures, from the Office of Admissions. Campus tours are available Monday through Friday. Prospective students should make advance arrangements for a tour by calling (719) 549-2418.

All correspondence concerning admission and campus visits should be addressed to the Office of Admissions, Colorado State University-Pueblo, 2200 Bonforte Boulevard, Pueblo, CO 81001-4901 or by e-mail to info@colostate-pueblo.edu

## 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, 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.

- 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 transcripts sent from all institutions previously attended.

Application forms and credentials must be filed by the following deadlines:

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## 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;
- Three years of mathematics, including Algebra I, Algebra II, and Geometry;
- 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; 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

$\begin{array}{lll}\text { ACT Subscore } & \text { SAT Subscore } & \text { ACCUPLACER Score }\end{array}$
Math........... 19 Math......... 460 Elementary Algebra. 85
For more information on Basic Skills Assessment, contact the Director of Student Academic Services at (719) 549-2225.

## 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) Official transcripts sent directly to CSU-Pueblo from each college attended; and
4) Final high school transcripts and ACT or SAT scores must also be submitted if total transfer credits earned are less than 13 transferable semester hours.

Note: Transfer students who have less than 13 transferable collegiate semester credit hours must meet the first-time freshmen standards. This includes international applicants.

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 should be sent when the final term is completed.

After admission, 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 Agreements

CSU-Pueblo is dedicated to the concept of guaranteed transfer opportunities for students enrolled at any of Colorado's public two-year and four-year institutions. Information on transfer agreements is available in the Office of Admissions.

Colorado State University-Pueblo has developed a program to enhance the process for students to transfer to the University from all Colorado community colleges known as Destination CSU-Pueblo. Student participants of this program will find transferring to the University simple, seamless, and user-friendly. While enrolled at their home Colorado community college students will enjoy the services of both their home campus and the University. Upon completion of their community college studies, they will matriculate to the University and continue progress towards their baccalaureate degree.

All two-year institutions in Colorado are participating in the Destination CSU-Pueblo transfer program. Ideally, community college students are encouraged to begin participation in Destination CSU-Pueblo their very first semester at their two-year institution. This program is designed to help students prepare for the transition to CSU-Pueblo by creating an individualized transfer plan and assure that each student meets both their two-year and four-year degrees in a timely manner. Students must submit a participation form in order to enroll in Destination CSU-Pueblo and complete the CSU-Pueblo institutional scholarship application in order to be eligible for the Destination CSU-Pueblo scholarship. For more information please contact the Office of Admissions or visit the University website at: http://www.goCSUPueblo.com.

## 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 the AA or AS degree from a regionally accredited institution as fulfilling the University's general education requirements.

Credit from an institution without regional accreditation may be accepted by petition for transfer after the student has completed at least one semester 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. Credit is not given for military service work experience.

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 and Records for one year.

## 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 Assistant Vice President for Enrollment Management 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 Assistant Vice President for Enrollment Management 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 Assistant Vice President for Enrollment Management 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 fifteen (15) calendar days of the postmark date of the letter from the

Assistant Vice President for Enrollment Management regarding the first appeal decision.

The University must hear and reach a decision on the appeal within fifteen (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 by writing the Vice Chancellor for Academic Affairs of the Colorado State University System (CSUS). 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 Vice Chancellor for Academic Affairs 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.

## 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;
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 500 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 60 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 is required. Transfer students: A minimum score of 500 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 60 on the TOEFL internet-based (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 Assistant Vice President for 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 semester in which they wish to enroll. Students seeking readmission must submit a $\$ 25$ reapplication fee (non-refundable). 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 exceptions to the policy must have prior approval from the Provost. Degree-seeking students who have attended another post-secondary institution or have taken college-level 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 who's 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

Applicants who wish to register as a guest without degreeseeking status should contact the Office of Admissions for current policies and procedures.

Guest students will be permitted to register only during the start date of the class thru the drop/add period for each class. A guest student may carry up to 6 hours per semester. A guest student is ineligible for financial aid. In place of a grade for each course, students receive the symbol NC (no credit) on their transcripts.

## High School University Program

Under Colorado's Postsecondary Options Act, high school juniors and seniors may register for classes at the University. Students must submit an admission application approved by their high school counselor, principal and parents for each term they wish to enroll. In some cases, the high school district may pay students' tuition. Students in the PSEO program are considered non-degree seeking students at the University. Information on such programs is available in the Office of Admissions.

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.

## RESIDENCE CLASSIFICATION

A person moving to Colorado must be domiciled in the state for 12 continuous months before becoming eligible for a change in residence classification. To qualify for instate classification for tuition purposes as a resident of Colorado, a person must do more than just reside in Colorado for the preceding 12 continuous months. "Residency" in this context means legal "domicile," which requires intent to remain in Colorado indefinitely in the sense of making one's permanent home in the state. The distinction is that one may have any number of residences at one time, but never more than one domicile.

A particularly relevant point is that one retains a former domicile until a Colorado domicile is established by the 12month residency.

## Intent is determined by:

1) The student's written declaration of intent to remain in Colorado indefinitely, i.e., the student has no present intent to leave the state now or in the future;
2) Documented evidence of overt actions that link the student to Colorado.

Examples which establish intent are: payment of Colorado state income tax, a Colorado driver's license, Colorado motor vehicle registration, the compliance with mandatory duty upon a domiciliary of the state, and voter registration. Obviously, the specific actions that establish intent varies according to the individual and the circumstances, but each individual must, with his/her circumstances, act consistently with the stated intent. An information brochure pertaining to the establishment of residency for tuition purposes may be obtained by writing to the Office of Admissions.

A student's classification as a Colorado resident for tuition purposes is made by the University at the time of admission, according to Colorado statutes. Any student classified as a nonresident who believes that he/she can qualify as a resident may obtain a petition and a copy of the statutes governing tuition classification from the Office of Admissions. The petition is processed only if the student has an application for admission on file or is currently enrolled. The petition is due no later than the day before the first day of class for the semester in which the change is requested. Deadlines are published in each semester class bulletin.

Students 23 years of age or under who are independent from their parents must prove emancipation and demonstrate residency on their own qualifications. Students must notify the Student Financial Services Office if their status changes from resident to non-resident. Any student who willfully gives wrong information to avoid paying nonresident tuition is subject to legal and disciplinary action.

## OFFICE OF FINANCIAL SERVICES

## TUITION AND FEES

Tuition and Fee rates and posted payments are on-line at http://www.colostate-pueblo.edu. Click TWOLF Student Portal to view billing formation. 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 charges at its June meeting prior to the start of the academic year. There may be other fees associated with certain classes offered at the University. All fees and charges are subject to change.

Payment plans are available. Students will be assessed a monthly $1.5 \%$ extended payment charge on any outstanding balance. Bills are not mailed, so students must review their bill on-line by accessing their PAWS account.

## COLLEGE OPPORTUNITY FUND

The College Opportunity Fund (COF) was created by an ACT of the 2004 Colorado State Legislature to provide state tax dollar financial support to eligible Colorado resident undergraduate students. The state will no longer appropriate money to institutions for undergraduate education, but will provide direct funding to the institution on behalf of the student. Students are required to submit a one-time application available at: https://cof.collegeassist.org

## PARKING

Parking decals may be obtained at the Cashier's Window 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:

- Administratively withdrawn
- Transcripts held
- Degree not conferred
- 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 semester in question. Appeal forms can be obtained by contacting the Office of Business Financial Services.

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 Student Financial Services, Administration Building, Room 212, telephone (719) 549-2753. Students may obtain further financial aid information by logging onto http://www.colostatepueblo.edu/sfs.

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

## Financial Aid Application Steps

1) To be considered for financial aid, students must be accepted for admission in a degree program.
2) Complete a Free Application for Federal Student Aid (FAFSA) by March 1. Students may apply online at http://www.fafsa.ed.gov.

The CSU-Pueblo school identification code is: 001365
3) Once the FAFSA has been processed, students will receive a Federal Student Aid Report, which will be electronically submitted to all the schools listed on the FAFSA.
4) Students whose data has been selected for verification will be required to submit a verification form, a copy of the tax return(s), and any other requested documents used to complete the FAFSA prior to being awarded. Students can view their application status and other required documents on CSU-Pueblo's Personal Access to Web Services (PAWS).
5) Once all required information is received, students will receive a financial aid award offer.

Students may not receive financial aid if they are:

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

## STUDENT FINANCIAL SERVICES 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) 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 Student Financial Services.
- Notify Student Financial Services 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 Student Financial Services. (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 Student Financial Services information.
- View your balance due, financial aid award, and other individual student information via PAWS.


## SATISFACTORY ACADEMIC PROGRESS POLICY

Federal and state regulations require that all students receiving financial assistance at the University meet standards for satisfactory academic progress to maintain eligibility for their financial assistance. In order to comply with these regulations, the University has developed this Satisfactory Academic Progress Policy. The policy is designed to measure minimum acceptable academic progress for financial assistance purposes.

Student Financial Services will review Satisfactory Academic Progress annually at the end of every spring semester.

The following are the criteria considered in the policy review process:

## I. Qualitative

## a) Cumulative Grade Point Average (GPA):

## Undergraduate \& Degree-Plus Students

Students enrolled in undergraduate programs must maintain a cumulative GPA of 2.00.

## Graduate Students

Students enrolled in a graduate program must maintain a cumulative GPA of 3.00.

## b) Repeating Courses

In the case where a student repeats courses, the first two times a course is taken, only the higher grade and credit earned are computed into the grade-point average (please refer to Repeating Courses under Academic Policies section of the Catalog).

Please note grades can be excluded for prior attempts when calculating a student's GPA, but these prior attempts will be included when measuring the quantitative component or cumulative credit hours earned addressed below.
c) GPA Calculation

Grades of S, U, W, WN, IP, IN, and NC are not computed in the grade-point average but will count towards attempted hours addressed below.

## II. Quantitative

## a) Credit Hours Earned

A student enrolled at the University must satisfactorily complete a minimum of $75 \%$ of the credit hours attempted. Satisfactory completion is defined as receiving a passing grade of $S$, $D$-, or better for courses attempted.
b) Cumulative Credit Hours Limit

Students at the University may earn a maximum number of credit hours while pursuing a degree. Students will be allowed to earn a maximum of $150 \%$ of the number of hours required by the degree-granting program. Maximum credit hour limits for each type of degree-granting program are as follows:
Type of Program

| Maximum Credit |
| :--- |
| 1st Bars |

2nd Bachelor's Degree ................................. 180
Teacher Certification..................................... 48
Graduate Programs ........................................ 45

Please Note: Maximum credit hours earned include hours transferred from other institutions, all attempted credit hours including repeated courses, and hours earned during a period of academic renewal.

## c) Withdrawals and Incompletes

A grade of " $W$ " for withdrawing from all or some of a student's classes and incomplete grades are counted towards the students credit hours attempted.
Students who receive incomplete grades are expected to complete the coursework by the end of the following semester, unless there is an existing Satisfactory Progress issue.

Failure to Meet Satisfactory Academic Progress Requirements

Satisfactory Academic Progress is reviewed at the end of the spring semester. Students who do not meet the minimum requirements will be placed on a probationary status in which time students have the following semester to regain their financial aid eligibility. At the end of the probationary period, if students fail to meet the requirements of the Satisfactory Academic Progress Policy their financial aid will be suspended and they will lose their financial aid eligibility for future semesters until the satisfactory academic progress requirements are again being met, or an appeal for reinstatement has been submitted and approved by the Satisfactory Academic Progress Committee.

## Appeal Process:

If mitigating circumstances exist (e.g. medical withdrawal, death of an immediate family member, call to active duty, catastrophic event, etc.) an appeal may be submitted up until the Friday before the next semester begins. Appeals submitted after the deadline will not be considered until the following semester.

Complete appeal packets will consist of the following documents:

- Financial Aid Appeal Form
- Documentation supporting appeal (i.e. letter from advisor or faculty, medical documentation, obituary notice, graduation planning sheet)

Please submit all of the required documentation to:
Satisfactory Academic Progress Committee
Colorado State University-Pueblo
Student Financial Services
Administration Building, Room 212
2200 Bonforte Blvd.
Pueblo, CO 81001-4901

## WITHDRAWAL POLICY

Students who withdraw during the drop/add period will receive a $100 \%$ tuition refund and be responsible for repaying all of their financial funds back to the University.

Students who totally withdraw from CSU-Pueblo after the drop/add period through $60 \%$ of the semester will have their tuition prorated (view tuition refund policy on-line at (http://www.colostate-pueblo.edu/SFS/TuitionFees).

A federal formula will be used to determine the amount of financial aid that has been earned by the student, which will be calculated for students who withdraw within $60 \%$ of the semester. 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.

Students who do not complete the official withdrawal process will potentially receive all failing grades on their transcript. Students with all failing grades at the end of each semester will be required to repay their unearned student aid based on $50 \%$ unless they can prove that they attended class past $60 \%$ of the semester.

## FINANCIAL AID PROGRAMS

## GRANTS

All grants are listed on our webpage: www.colostatepueblo.edu/sfs/apply/grants.htm. 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)

The CSG 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.

## 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 600 students in the work-study program.

## General Qualifications:

1) Must be enrolled at the University for the next academic year as a degree-seeking student.
2) Must be making satisfactory academic progress.
3) Must enroll in and maintain six (6) credit hours for each semester 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 workstudy. 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 workstudy. Students are selected for the program if qualifications are met and if funds are available. Students may work on or off-campus and may be enrolled in undergraduate and 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 (Federal Stafford or Federal PLUS) being certified by CSU-Pueblo, the applicant must complete the financial aid application process (including the Free Application for Federal Student Aid).

## Federal Perkins Student Loan

(Formerly titled National Direct Student Loan-NDSL) a 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, UNISA, at (800) 875-8910.

## Federal Stafford 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:

## Stafford Loans

Stafford 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 and during grace and deferment periods.

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 Stafford 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 Stafford 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 Stafford Loans

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

*Graduate students may borrow up to $\$ 20,500$ each academic year. Only $\$ 8,500$ of this amount may be subsidized. Aggregate limits are also higher.

## Federal Stafford Loan Check Distribution

Loan funds are sent directly to the school approximately a week before the beginning of each semester.

The school is required to disburse loan funds within three (3) working days. If the student is ineligible for disbursement the funds must be returned to the lender immediately.

## Federal PLUS-Parent Loan for Undergraduate Students

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 $8.5 \%$. 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 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.

## Short-Term Loans

The Short-Term Loan is primarily requested to purchase books at the start of the semester. Financial emergencies that present extreme hardship may also be considered.

Students must be enrolled for at least 6 semester credits, must be in good standing and must have a pending Financial Aid disbursement for that semester that will be used to pay the loan back. Maximum loan amount is \$500 per semester. There is a fee charged for the loan.

Loans are to be repaid within a short period of time (normally within 60 days). If the loan has not been repaid or arrangements made for its repayment by the due date, the delinquent loan will be treated as an overdue student account and handled in accordance with University policy. Applications are available in Student Financial Services. A fee assessed for processing the loan will be deducted from the loan amount.

## SCHOLARSHIPS

## State and Institutional Scholarships

CSU-Pueblo offers a wide variety of scholarships to incoming freshmen and transfer students. Scholarships are awarded based on achievement and financial need. Admissions and financial aid applications are reviewed by a University committee to determine recipients. Scholarships are also available for first generation students and international students.

## Scholarships

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

Students are also encouraged to visit http://www.colostate-pueblo.edu/SFS/Scholarships for more information about scholarship searches or visit Student Financial Services, Admin 212.

## Impact on Financial Aid

Because scholarships are considered direct resources under state and federal guidelines, scholarships are a 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.

## 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 Records Office in the Administration Building, Room 202, 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.

## CAMPUS LIFE, STUDENT ENGAGEMENT AND DEVELOPMENT

## STUDENT LIFE AND DEVELOPMENT

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 important, opportunities to make a difference.

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

## Vision

Student Life will be the driving force that integrates student learning and student development to create an engaged and caring community of learners and contributing citizen leaders through innovative student services that embrace student success, access, diversity and meaningful student involvement programs.

## Student Life

Occhiato Student Center 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 15 senators elected from the student body. It is presided over by the Vice President of Legislative Affairs. The Executive branch
consists of the President and the Vice President of Finance and Administration. 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.

## RESIDENCE LIFE AND HOUSING

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

The residence halls are home to more than 750 students. The University Housing Office is located in the Belmont Residence Hall. Cable and internet connections are included in each room. 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.

## 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.

Freshmen students required to live in University housing will be defined as having fewer than 30 credit hours, or less than two full-time academic semesters. Credits taken concurrent with high school and/or credits attained through Advanced Placement (AP) examination, etc., do not apply towards living experience.

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 charges.

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

## 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 50,000 square-foot recreation area (including a court for volleyball and basketball), study lounge, and laundry facilities. There is a computer lab open 24 hours, tutoring lab, vending machines, an ice machine, and many other amenities. The front desk is staffed 24 -hours 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, with drawer space below, two desks with a study lamp built into the desk, two bookshelves, and two desk chairs.

## New Housing - Crestone Hall

Beginning in Fall 2009, there will be a new residence hall that will be home to 254 students in 72 bedroom suites. This new building will feature a computer lab, classroom and meeting space as well as a significant amount of open social areas.

## Application Information

A $\$ 125$ deposit must accompany each application; $\$ 25$ of the deposit is used as an application fee and is nonrefundable; $\$ 100$ of the fee is used as a security/damage deposit. Housing contracts are issued for the entire academic year and must include a meal plan.

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
(In cooperation with Colorado State University-Pueblo)
University Village at Walking Stick is the Colorado State University-Pueblo on-campus apartment community for students and offers a unique housing opportunity for sophomores, juniors, and seniors and those students who are exempt from the campus live-in requirement. (Freshmen under the age of 21 will be placed on a waiting list and placed in the apartments if space is available.)

The apartments offer campus high-speed Internet access in each bedroom, a common area house phone, and premium cable TV in each bedroom and the common area. Each unit features individually controlled heating and air-conditioning. Two floor plans are available each consisting of 4-bedrooms, 2-baths. All utilities are included in the cost and a $\$ 350$ deposit is required.

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 two 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.

The 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: Lori Landree, Student Apartment Director at lori.landree@colostate-pueblo.edu
Website: http://www.universityvillage-csupueblo.com/

## Off-Campus Housing

The Occhiato Center Office maintains a file of off-campus, privately owned rooming houses and apartments. Since listings change rapidly, prepared housing lists are not furnished.

## Housing for Married Students

Presently, no housing is available on campus for married students. Married students should contact the Occhiato Center Office (Room 113) for referral to housing in the community.

## Contract Board Policies

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

## 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.


## Intramural Sports and Recreation

(719) 549-2665 or email elc@colostate-pueblo.edu

The University community has an opportunity to participate in sport leagues and special events through the Intramural Program in an organized environment.

Providing intramurals regularly provides scheduled recreational activities with student interests in mind. The Student Recreation Intramural Program emphasizes: recreation, health, wellness, teamwork, leadership, sportsmanship, social interaction, as well as cultural and gender sensitivity.

Some of the activities offered include: flag football, soccer, basketball, volleyball, table tennis, and video games.

## Outdoor Pursuits

(719) 549-2091

The Outdoor Pursuits Program offers a wide range of outdoor recreation and skill-building activities for students. Professional and student staff members guide trips such as rock climbing, kayaking, backcountry skiing/riding, avalanche safety training, backpacking, mountaineering, peak climbing, and mountain biking. Outdoor Pursuits can also provide maps, expert advice, reading material, and other resources to plan individual adventures. Additionally, Outdoor Pursuits oversees the management and operation of the climbing wall and challenge course. Use of outdoor equipment is available by reservation for a modest semester user fee. Outdoor Pursuits also houses extensive professional bicycle repair and ski/board tuning benches.

Outdoor Pursuits core programs are:

- Outdoor Programs/Trips
- Wilderness Education Leadership Program
- Challenge Course/Team Development Programs
- Rock Climbing Wall
- Equipment Rental

Outdoor Program trips include:

- Hiking
- Rock climbing
- Mountain biking
- Backpacking
- Kayaking
- Camping
- Skiing \& snowboarding
- Snowshoeing


## Wilderness Education Leadership Program

An integral component of the Outdoor Pursuits program at Colorado State University-Pueblo 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 go on at least five extended trips, be a Wilderness First Responder, lead at least two trips as a student leader, and they must take specific outdoor adventure education courses at CSU-Pueblo.

## Challenge Course

(719) 549-2023 or email elc@colostate-pueblo.edu

Colorado State University-Pueblo's Challenge Course consists of a series of obstacles, known as elements, suspended from utility poles. The course is constructed with steel cables, ropes, and wood.

The course offers a challenging environment designed to promote cooperation and group problem-solving skills, as well as develops individual self-confidence. Programs are group centered and vary in degrees of difficulty, depending on each group's specific needs and goals. Physical prowess is not necessary for participation; however, teamwork is essential.

Participants are asked to take emotional, mental, and physical challenges which utilize a wide range of the group's resources.

Light and agile group members play a critical role on some elements; however, size and strength are helpful on others. The analytical thinkers and supportive individuals often provide solutions to perplexing obstacles.

Our trained facilitators provide positive support and encouragement as participants explore their individual and group abilities. As they cooperate to accomplish common goals, individuals discover the value of trust, shared responsibility, and mutual support.

Our facilitators will design an experience based on your group's objectives. Your program will be a unique
adventure with the potential to induce learning and behavior change on both an individual and group basis.

## Rock Climbing Wall

(719) 549-2091 or email elc@colostate-pueblo.edu

The climbing wall at CSU-Pueblo is located in Massari Arena. The wall has six top rope climbing routes and three sport lead routes. Classes range from introductory session for the first timer to advanced anchor and rescue workshops. The wall is open during the day and evenings. Check out the Outdoor Pursuits website for more information. Also, keep checking the calendar for all of our climbing trips.

## Equipment Rental

The Outdoor Pursuits program provides CSU-Pueblo students with the opportunity to rent equipment for their own personal trips. A co-op fee per semester will allow access to equipment such as:

Telemark skis, boots and backcountry gear
Showshoes and poles
Tents
Backpacks
Camping equipment
Maps, guidebooks
Sleeping bags
Rock climbing shoes
Mountain bikes
Backcountry cooking gear... and much more!

## STUDENT RECREATION CENTER (SRC)

The Student Recreation Center is a student funded project designed to serve the recreational needs of students at CSU-Pueblo. The building is approximately 40,000 square feet located adjacent and attached to the southern portion of the HPER Building.

The Student Recreation Center building features:

- Cardiovascular and strength and conditioning areas
- An aerobics dance room
- A multi-court gymnasium with an elevated $1 / 12$ th mile running track
- Four racquetball courts
- Swimming pool
- Rock climbing wall
- Multi-purpose room
- Locker rooms
- A lounge with café and outdoor seating
- A health/wellness/nutrition suite
- Outdoor Pursuits Programs equipment rental space


## MULTICULTURAL CENTER

## Mission

It is the goal of the Multicultural Center (MCC) 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 MCC 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: Martin Luther King's Birthday, Black History Month, Cinco de Mayo, Mexican Independence Day, 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 semester 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 internships, cultural and diversity workshops and programs to develop an awareness of the diversity in our global society.

## Leadership

THE MCC provides opportunities for students to learn about educational opportunities and career opportunities. The MCC 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 MCC is located in the basement of the Occhiato University Center adjacent to the Center for International Programs. 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 9:00 a.m. until 5:00 p.m. on a daily basis and is available upon request for the utilization of student organizations, departments, or committees.

## STUDENT ACTIVITIES

The Office of Student Activities facilitates a comprehensive student engagement program intended to enrich the campus experience of University students. Inherent in this mission, Student Activities 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, community service, and campus governance programs.

The Office of Student Activities is the office that engages 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) Student Activities Events Programming Board, (3) Special Events Committee, (4) Student Organizations, (5) Greek Life, (6) Student Leadership Development, (7) Service Learning Opportunities, and (8) Student Experience Appreciation.

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

- Participate in out-of-class learning activities;
- Participate in campus governance;
- Develop leadership abilities;
- Develop healthy interpersonal relationships;
- Use leisure time productively;
- Explore activities in individual and group settings for self-understanding and growth;
- Learn about varied cultures and experiences, ideas and issues, art and musical forms, and life styles;
- Design and implement programs to enhance social, cultural, multi-cultural, opportunities;
- Design and implement programs that provide intellectual, recreational, community service, and campus governance involvement opportunities;
- Enable group interests and encourage group activities; and
- Learn about, and use campus facilities and other resources.

The Office of Student Activities (OSA) is located in the lower level of the Occhiato University Center, Room 002. The Office of Student Activities gives ample opportunities to enrich the campus community by supplementing and enhancing the world of academia, social networking, personal perspective, by providing collaborative ideas, thought-provoking programming, entertainment, leadership development, cross-cultural awareness, and expanding the view of student life.

Throughout the academic year, the Office of Student Activities promotes events that motivate, challenge, and encourage divergent thinking through activities and events that are free for all CSU-Pueblo students. OSA's popular weekly event series, Wolf Pack @ Nite, brings events such as comedians, cultural heritage dinners, movies, magicians, karaoke, sideshow performers, random acts, and the ever-popular casino night! Please visit the Student Activities website to view all events: http://www.colostatepueblo.edu/StudentActivities.

OSA provides plenty of opportunities for students to get involved on campus. OSA also provides an atmosphere where students can develop culturally, cognitively, and socially through a diverse series of events and activities. Contact (719) 549-2151 for more information or to learn how you can get involved with either campus life or the OSA team.

## Non-Traditional Students Center

Non-Traditional Students Center (NoTs) is an informal social and educational environment for non-traditional 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 quietly be before and after their classes. The Center is located in the basement of the Psychology building.

## Special Events Committee

In 1999, the CSU-Pueblo Concert Committee was formed by a referendum enacted by the student body, which proposed a concert fee in order to bring nationally recognized musical talent to the campus of CSU-Pueblo. The fee was established to aid in retention efforts of the University and to enhance the quality of campus life. In the spring of 2001, the fee was changed to a permanent fee and renamed the Special Events Fee.

The Special Events Fee brings nationally recognized speakers, musical talent and performing arts events to the
campus of CSU-Pueblo. In addition, the fee may be used to fund special events as designated by the Special Events Committee. Artists/performers sponsored by the committee include: The Used, Army of Me, Jimmy Eat World, Taking Back Sunday, Nelly, Eve 6, Busta Rhymes, Dr. Maya Angelou, Second City Comedy Club, and many more. For more information, contact the Office of Student Activities at (719) 549-2151.

## STUDENT ORGANIZATIONS

CSU-Pueblo students have opportunities to take part in the activities of a number of various student organizations. Memberships of most student organizations are open to the campus community. Students interested in starting a new recognized student organization must first find a faculty or staff member willing to advise the student group. Students then must obtain a Student Organization Registration Packet from the Office of Student Activities (OSA) Office and complete and return the forms to OSA. For information please contact the Office of Student Activities at (719) 549-2151.

Every effort has been made to list all recognized student organizations at the time this catalog went to press. For further information or an updated list of student organizations, please visit the Student Organization website: http://studentorganizations.colostate-pueblo.edu.

## Academically-Based Organizations

- American Choral Directors Association
- American Society of Mechanical Engineers
- Association of General Contractors
- Athletic Training Club
- Automotive Booster Club Jr B-3
- Collegiate Music Educator's National Conference
- English Club
- History Association
- HSB Accounting Club
- Institute of Electrical and Electronics Engineers, Inc.
- Math and Physics Club
- Physical Education Club
- Political Science Club
- Psychology Club
- Recreation Students' Club
- Society of Mexican American Engineers \& Scientists
- Southern Colorado Association of Nursing Students
- Student Social Work Organization
- Students in Free Enterprise
- Teacher Education Association
- Tempered Steel Magazine
- Voices of Empowerment


## Campus-Life Organizations

- Anime Club
- Art Club: Organization for Meaningful Aesthetics
- Motorcycle Club
- Soul Steppers Drill Team
- Student Alumni Association
- Students for Environmental Awareness
- Student-Athlete Advisory Committee
- ThunderWolf Press


## Cultural-Based Organizations

- Black Student Organization
- Colorado International Student Association
- Gli Amici d' Italia
- Mujeres Unidas de CSU-Pueblo
- Prizm: Gay, Lesbian, Bisexual, Transgender, Ally Alliance
- Sign Language Club
- Turkish Club


## Social Greek Organizations

- Greek Council
- Alpha Sigma Alpha - Zeta Pi Chapter
- Kappa Sigma - Mu Alpha Chapter
- Lambda Chi Alpha Fraternity
- Order of Omega


## Honor Societies

- Biology Club
- Phi Alpha Theta
- Phi Alpha-Zeta Delta Honor Society
- Tau Alpha Pi-Beta Colorado Charter


## Specific Interest Organizations

- Campus Crusade for Christ
- Catholic Campus Ministry
- Christian Challenge
- College Republicans
- Engraved
- Fellowship of Christian Athletes
- Organization of Pagan Students
- Pueblo's Young Life


## SERVICES, SUPPORT, AND STUDENT DEVELOPMENT PROGRAMS

## CAREER CENTER

The Colorado State University-Pueblo Career Center is located on the main floor of the Occhiato University Center. The Career Center offers employment services to current students and alumni from the University.

The Career Center assists students with professional employment, internships, career planning and career coaching. This includes: Résumé and Cover Letter development, interviewing skills, how to search and apply for internships, and strategies on how to conduct a selfdirected job search.

The Career Center receives and posts full and part-time employment opportunities and internships on a regular basis. Resource information such as salary surveys, job choices magazines and reference materials are also available.

The Career Center coordinates all on-campus recruiting with employers and coordinates the annual Career, Internship, and Education Fairs. The Career Center collaborates with the Hasan School of Business in coordinating the annual Dining for Success-etiquette training as well.

The Career Center is located in the Occhiato University Student Center, Suite 103. 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 Counseling Center is to provide students with a means to understand those issues that interfere with the effective functioning of their lives and to then support them as they make new or different choices toward happier and more productive lives. We are not here to "analyze" individuals or to give them advice. Rather it is our intent to act as guides.

Your visits with a counselor are confidential and the records of your counseling sessions are kept separate from you 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 Center's staff works with students whose concerns include stress, depression, loneliness, difficulty adjusting to college life, difficulty adjusting to life in America, suicidal thoughts, relationship difficulty, and sexual assault to name a few. Crisis services are provided only during regular business hours.

The Counseling Center also offers walk-in consultation, which is available to anyone who has a particular question about a mental health issue. This service is provided to give a student, who does not want counseling, an opportunity to talk to a counselor in order to get specific information related to their question.

The Counseling Center is a free service to all degreeseeking CSU-Pueblo students. It is located in the Psychology Building in Room 236. Appointments can be made by calling 549-2569/2479.

## SOUTHERN COLORADO EDUCATIONAL OPPORTUNITY CENTER (SCEOC)

SCEOC is a federally funded grant program, sponsored by CSU-Pueblo that assists first-generation and low-income individuals in gaining access to higher education. The program provides services to high school students and adults in twelve southern Colorado counties and one northern New Mexico county.

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.

The central office is located on the CSU-Pueblo campus, Room PE 265 in Massari Arena. Satellite offices are located at the Pueblo Workforce Center, CSU-Pueblo's Citadel Center, and on community college campuses in 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.sceoc.net.

## STUDENT CONDUCT

The Dean of Student Life and Development, or his/her designee, is responsible for promoting observance of student code of conduct, enforcing the standards, and administering sanctions for violations of the code. If it is determined that a student has violated a University regulation, a sanction may be imposed. Sanctions range from warning to expulsion from the University. Decisions made by the Dean of Student Life and Development, or his/her designee may be appealed to the Campus Appeals Board, the highest hearing and appeal board for nonacademic matters at the University.

Students participating in the University's intercollegiate athletic programs are also subject to the Athletic Department's Code of Conduct.

Details of the hearing processes are contained in the Student Conduct Code - Policies and Procedures Manual which contains a detailed explanation and description of institutional disciplinary philosophy, rules and regulations. Decisions involving academic infractions, appeals, etc., must follow the procedures established by the academic division of the University.

## Student Conduct Code

Members of the Colorado State University-Pueblo community are expected to observe the laws of the City of Pueblo, the State of Colorado, and the Federal Government, and to respect the rights and privileges of other members of the community. CSU-Pueblo students, non-students, faculty, and staff, upon entrance to the University, neither gain nor lose any of their rights or responsibilities of citizenship. As a community, CSUPueblo has the obligation to establish those regulations that best serve and protect its integrity as an institution of higher learning.

Any student or student organization found to have committed or to have attempted to commit the following misconduct is subject to disciplinary sanction:

1) Academic dishonesty including but not limited to: cheating, plagiarism, unauthorized possession or disposition of academic materials, falsification, or facilitation of acts of dishonesty. Specific procedures for cases of academic dishonesty are also described in the Academic Policies in the General Catalog, the Faculty Handbook, or the Honor Code of the Nursing Program as applicable.
2) Knowingly furnishing false information to any University official, faculty member, office, or organization or intentionally initiating or causing to be initiated any false report, warning or threat of fire, explosion, or other emergency.
3) Forgery, altercation, misuse, mutilation, or unauthorized removal of any University document, record, identification, educational material, or property.
4) Disruption or obstruction of teaching, classroom or other educational interactions, research, administration or disciplinary proceedings, or participation in an activity that disrupts normal University activities, and/or threatens property or bodily harm or intentionally interferes with the right of access to University facilities or freedom of movement of any person on campus.
5) Engaging in behavior or activities that obstruct the right of free speech or expression of any person on campus. (For more information, refer to the CSUPueblo policy on Freedom of Expression and Inquiry, which addresses student rights and responsibilities related to political expression, and contact the Office of Dean of Student Life and Development if you believe you have been treated differently because of your political, or other, perspectives.)
6) Abusive conduct, including physical abuse, verbal abuse, threats, intimidation, stalking, hazing, coercion, and/or other conduct which threatens or endangers the physical or psychological health, safety, or welfare of one's self, another individual or a group of individuals.
7) Harassment of any member of the University community, meaning verbal or physical harassment on the basis of gender, race sexual orientation, age, religion, or physical disability. (Refer to the CSUPueblo Sexual Harassment Policy and contact the Office of Affirmative Action for more information on these issues.)
8) Sexual misconduct including but not limited to: obscene, lewd, or indecent behavior; deliberate observation of others for sexual purposes without their consent; taking or posting of photographs/images of a sexual nature without consent; possession or distribution of illegal pornography; viewing or posting pornography in public venues; non-consensual contact or penetration; engaging in coercion or constraint; or engaging in sexual activity with a person who is incapacitated or otherwise unable to give consent.
9) Rioting: aiding, abetting, encouraging, participating in or inciting a riot. Failing to disperse at the direct request of police/sheriff or University officials.
10) Failure to comply with the verbal or written directions of any University officials or law enforcement officers acting in the performance of their duties and in the
scope of their employment, or resisting police/sheriff officers while acting in the performance of their duties, including failure to identify oneself to these persons when requested to do so.
11) Attempted or actual theft of, damage to, use of, or possession of other person's or University property or identity or unauthorized use of such; unauthorized entry, use, or occupation of University facilities, property, or vehicles; or unauthorized possession, duplication, or use of University keys or access devices.
12) Use or possession 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.
13) Violation of any rules, contracts, or agreements governing residence in or use of University owned, controlled or affiliated property, or other authorized special events. Violation of any University policy, rule or regulation, which is published in hard copy or available electronically on the University Website.
14) Unauthorized soliciting or selling in violation of the University solicitation policy.
15) Violation or conviction of any federal or state law or local ordinance.
16) Use, possession, manufacturing, or distribution of alcoholic beverages except as expressly permitted by law or University policy. Alcoholic beverages may not be used by, possessed by, or distributed to any person under twenty one (21) years of age. Public intoxication is not permitted on University property.
17) Use, possession, manufacturing, or distribution of illegal drugs including but not limited to marijuana, narcotics, methamphetamine, cocaine, opiates, LSD, mushrooms, heroin, designer drugs such as Ecstasy and GHB, or other controlled prescribed, or for use other than the prescribed purpose. Possession or use of drug paraphernalia but not limited to equipment, products, and materials used to cultivate, manufacture, distribute, or use illegal drugs.
18) Abuse of computer facilities or technological resources including but not limited to: unauthorized entry to or use of computers, access codes, telephones and identifications belonging to the University or other members of the University community; unauthorized entry to a file to use, read,
transfer, or change the contents, or for any other purpose; interfering or disrupting the work of any University member; sending abusive or obscene messages or images; disrupting the normal operation of the University computing systems; violating copyright laws; or any other violation of the University Technology policies.
19) Abuse of the Student Conduct system including; failure to obey the notice to appear for a meeting or hearing; falsification, distortion, or misrepresentation of information; disruption or interference with the orderly conduct of a hearing; or witnesses or limitations related to access to specific facilities; harassment or intimidation of any person involved in a conduct proceeding; failure to comply with disciplinary sanctions or requirements.
20) Assisting, conspiring, or inciting others to commit any act of misconduct set forth in 1 through 19 above.

## Group Offenses

1) Societies, clubs, or similar organized groups in or recognized by the University are subject to the same CSU-Pueblo Student Conduct Code as those for individuals in the community.
2) The knowing failure of any organized group to exercise preventive measures relative to violations of the CSU-Pueblo Student Conduct Code by member will constitute a group offense.

## Violations of Law on Campus

University disciplinary proceedings may be instituted against a student or student organization charged with a violation of federal, state, or local criminal law and this Student Conduct Code without regard to the settlement of civil or criminal litigation in court or criminal arrest and/or prosecution.

Proceedings under the Student Conduct Code may be carried out prior to, simultaneously with, or following off campus civil or criminal proceedings at the discretion of the Dean of Student Life and Development or his/her designee Student Conduct Administrator. Determinations made or sanctions imposed under this Student Conduct Code shall not be subject to change because criminal or civil charges arising out of the same facts giving rise to violations of University rules were dismissed, reduced, or resolved in favor of or against the criminal or civil law defendant.

To protect its educational mission, the University takes a firm stand concerning violations of law on campus. The Pueblo County Sheriff's Office located at the Colorado State University-Pueblo campus is charged with the
responsibility of maintaining law and order at Colorado State University-Pueblo and for enforcing all laws, local ordinances and regulations of the University, except when such enforcement is, by such law, made the responsibility of another department, official or agency.

Deliberate illegal activity, which comes to the attention of CSU-Pueblo officials, is not tolerated. An offense requiring police action may also be treated internally as a University disciplinary matter. A full document detailing police policies and statistics is available from the police upon request. Contact (719) 549-2373.

## T.L.C. (TACKLING LIFE'S CHOICES) TOBACCO PREVENTION AND AWARENESS PROGRAM

The Tackling Life's Choices program is a dynamic and proactive approach to changing the perception of the CSU-Pueblo community and of the college culture through the promotion of healthy lifestyle choices. Its mission statement is to create an environment on campus that promotes healthy lifestyle choices for health and wellness and the prevention of alcohol and drug abuse.

## ALCOHOL AND OTHER DRUGS EDUCATION PROGRAM

The AOD Coordinator works closely with the Office of Student Activities, Student Conduct, Student Counseling Center, Residence Life, interested students, faculty, and staff.

The coordinator also serves as a primary resource person to students and staff in all areas of alcohol and drug education by working with the residence assistance staff and student groups to further develop and enhance their alcohol and drug programming efforts.

The AOD Coordinator's role is to develop, lead and coordinate campus wide drug and alcohol education programs, advise student groups and organizations regarding alcohol and drug education issues, provide support and leadership for substance free student groups and present alcohol and drug education programs and workshops for students.

The AOD Coordinator will also serve as a resource to students who are in need of further clinical therapy, and or education.

For more information please contact:
Alcohol and Other Drugs Education Program
PE Building, Room 261
(719) 549-2040.

## 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 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 Doctor, Nurse Practitioner, or Nurse. You may, however, incur charges for laboratory tests, physical or gynecological exams performed or for medication dispensed. 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 and an RN. 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.

## 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 SSS is to increase the retention and graduation rate of participants. This is accomplished by providing supportive services such as:

- Academic action plans,
- Peer tutoring (one-to-one, group, and drop-in),
- Academic, financial aid, and career, and graduate school counseling;
- Supplemental instruction in historically difficult courses;
- Academic workshops; and
- Educational resource center and study room.

To be eligible to receive services from the 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, OR
- Be a first-generation student, OR
- Be a student with a documented/diagnosed disability, AND
- Meet the academic criteria as established by the 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 Occhiato University Center (OUC) 035 or phone (719) 549-2111. Additional information can be located on our website: http://www.colostate-pueblo.edu/sss.

## UPWARD BOUND

The Upward Bound Program at Colorado State UniversityPueblo is an academic pre-college program which generates skills and motivation necessary for success in education beyond high school. The criteria for acceptance into the program includes low-income and potential first generation college students who are enrolled in target high schools seeking to prepare themselves for entry into a postsecondary institution.

## Eligible participants must:

1) Have completed the eighth grade;
2) Be between the ages of 13-19;
3) Be currently enrolled in a high school;
4) Be planning to attend college;
5) Need the services of Upward Bound to help achieve their goals; and
6) Have a high school grade point average of 2.500 or better.

Basic skills, counseling, tutoring and skills necessary for acceptance into and success in college are provided. An intensive six-week summer program offers up to six credits of college courses for graduating seniors. The remaining participants attend daily classes emphasizing mathematics, science, English, and writing. Applications are available at high school counselors' offices. For more information, please call (719) 549-2750, visit our website: http://partners.colostate-pueblo.edu/upwardbound, email us at upwardbound@colostate-pueblo.edu or fax us at (719) 549-2942.

## 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://partners.colostate-pueblo.edu/veteransupwardbound

VUB Contact Information:

- Colorado State University-Pueblo

2200 Bonforte Blvd, OUC Bldg., Room 006
Pueblo, Colorado 81001-4901
Phone: (719) 549-2824
(719) 549-2875

Fax: (719) 549-2914

## 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)
- 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
- Other previous educational agencies or institutions attended

A student, by the end of the second week of classes, may notify the Records Office (Administration Building, Room 202) in writing that directory information should not be released without prior written consent by completing the "Request to Withhold/Release Directory Information" form. If a student later wants this information released when requested, he/she needs to complete a new "Request 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):

- 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;
- 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 which 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 Dean of Student Life. Any student judged 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).

Academic dishonesty is a behavioral issue, not 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 Student Code of Conduct Policies and Procedures Manual.

Whether or not punitive action has been implemented by the faculty, a report of the infraction should be submitted to the Dean of Student Life who may initiate additional disciplinary action. A student may appeal a grade through the Academic Appeals Board. The Dean of Student Life's decision may be appealed through the process outlined in the Student Code of Conduct Policies and Procedures Manual.

## 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 law 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 the University Police 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 (Student Conduct Code, Sexual Harassment Policy, etc.) also apply.

## 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 does not apply to general education courses.

## 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

A guest student is defined as one who wishes to enroll in courses without degree-seeking status. In place of a grade for each course, students receive the symbol NC (no credit) on their transcripts. Additional information on nondegree students is contained in the Admission section of this 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 or on-line.

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.

## 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. Students registered for 12 or more semester credit hours are considered full-time. However, it should be noted that in order to complete an undergraduate program in four years, students must earn a minimum of 15 credits each semester.

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

| Fall/Spring Semesters <br> Undergraduates <br> Full-time |  |
| :--- | :--- |
| Half-time | 12 or more credits |
| $\quad$ Less than half-time | $6-11$ credits |
| Graduate Program | Below 6 credits |
| Full-time | 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 |
| 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 |

Contact the Records Office for certification of enrollment status, level (class), grade point average and term(s) of attendance. (Please note that the above schedule for enrollment status may differ from the full-time/part-time schedule as recognized by the financial services area.)

## GRADES AND THE GRADING SYSTEM

## Awarding of Grades

Grades are earned by students and awarded by faculty. 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.

## 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, U, IN, W, WN, NC, 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 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 $\mathbb{I N}$ is recorded at the end of the semester 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 IN 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 semester 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 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
- Be degree-seeking
- Earn at least 12 credit hours at Colorado State University-Pueblo, and
- Receive no grade of "incomplete"

The Deans' List is generated and published fall and spring semesters.

## GOOD ACADEMIC STANDING

The academic standing of all students is reviewed two times each year, 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) beyond their completion of the second semester of their freshman year in which their cumulative grade-point 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 terms (excluding summer) to raise their grade-point average to a 2.000 .

## ACADEMIC SUSPENSION

Students who fail to clear Academic Probation after two regular terms (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) EXCEPT BY SPECIAL PERMISSION.

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 more than 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. 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.

## POLICY ON AWARD OF CREDIT

Instructional activity is broadly categorized into three categories: Type A, Type B and Type C by the Colorado Department of Higher Education (CDHE) as published in its Policy for Reporting Full-time Equivalent Students.

## 1) Type A Instruction

Type A instruction is defined as consisting of "those methods in which the consumption of faculty resources is reasonably concrete and measurable." In these instances, the criteria are established in terms of a faculty Base Contact Hour. The Base Contact Hour is a minimum of 750 minutes (this translates into a 50 minute period for 15 times). Type A instructional activities are audit; private instruction; lecture; recitation, discussion, and seminar; laboratory (vocational and technical; academic and clinical); physical education and recreation activity courses; studio (art and music) and field instruction.

## 2) Type B Instruction

Type B instruction is defined as consisting of "those methods where the measurement of faculty resource consumption by students is less definitive and will vary depending on the activity. The activities occurring in these areas are, therefore, defined in a "contractual relationship" between faculty and students." Examples of Type B instruction are independent study/special or independent project; Master's thesis research project and practicum, student teaching, internship, and cooperative education.

## 3) Alternative Delivery Methods

These are courses delivered in non-traditional formats, including but not limited to, telecourses, selfpaced instruction assisted by educational technologies, interactive video, telephone lines, computer based or computer assisted instruction, correspondence, videotapes or CD-Rom, Internet or Intranet, multimedia, etc... The credit hours for courses utilizing these alternative delivery methods shall be assigned based upon the equivalency or similarity of the course content's scope and depth and the course's evaluation methods to the same or similar courses currently offered at CSU-Pueblo. Lecture courses delivered on-campus and also delivered via interactive video to approved off-campus sites are subject to Type A contact hour requirements for the lecture course and shall be counted as Type A Instruction.

## 4) Type C Instruction

These are activities that may generate credit, but the credit cannot be reported for FTE reimbursement. The activities involve relatively little faculty resource consumption or are considered as a student service. Included in Type C instruction is credit by exam and credit for prior learning of life experience.

## COURSE LOADS AND OVERLOADS

Enrollment in more than 18 credit hours in a given semester 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 semester.

## 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). 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 be granted University credit as well as advanced placement.

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 Office of Admissions.

## 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 Office of Admissions for additional information.

## 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 by the appropriate academic department. 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 Office of Admissions for additional information.
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 semester 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 and chair of the department.

## 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. ("Repeatable" 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 $A$ 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.

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/add period. Under no circumstances shall the instructor 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.

## Adding Courses

Courses may be added to a student's schedule during the drop/add period, as specified in Semester Notes. Course additions may be processed through the Records Office or through the Web Registration System.

## 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

Courses may be dropped from a student's schedule through the drop/add period as specified in the Semester Notes and on-line without a record of the dropped course appearing on the student's permanent record. Courses may be dropped officially through the Records Office or processed through the Web Registration System. Short or mini-courses may be dropped in the same manner before 15 percent of the course duration has passed.

## WITHDRAWAL FROM A COURSE

Immediately following the end of the drop/add 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.

## FACULTY INITIATED STUDENT WITHDRAWAL

Under certain specific circumstances, a faculty member may withdraw a student from a course. The circumstances are either $A$ or $B$ below.
(A) Faculty may withdraw a student from a course for nonattendance if the student has never attended class through the end of the drop/add 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/add 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 teacher of the course) acknowledging the withdrawal may be substituted for the student signature. The student will receive a $W$ 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.

## WITHDRAWAL FROM THE UNIVERSITY

Up until the drop/add period expires, students may drop all courses without charge by using our web registration system 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/add period, students who are planning to withdraw from all courses and leave the University for any reason must file a withdrawal form with the Student Academic Services Office (P-232) 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

Undergraduate students may request that all grades in previous semesters be retroactively removed and replaced by entries of W on the transcript if they have experienced, during that term, health and/or personal problems so severe that they could not reasonably have been expected to complete the semester satisfactorily. The requests must be submitted with documentation to the Registrar. Appropriate documentation should include direct information from a professional who can attest to the student's claim of illness or legal issues and speak clearly to the difficulty that was encountered by the student. If a student chooses not to share such information, the Student Academic Appeals Board should decide the case based on the information available.

Retroactive withdrawal applies to every course for a particular term and not for selective courses during a term.

## 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.

## 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.

## 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 unless permitted by the instructor.

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.

## TRANSCRIPTS OF CREDIT

Official transcripts are issued by the Records Office at the written and 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, and International).

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 three to 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 semester. 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. Official transcripts on file from other institutions cannot be relinquished. 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 three to 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 semester 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; and
- The student's signature (this provides CSU-Pueblo with the necessary authorization to release the transcript to the designee.


## 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, 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.

## GRADUATION LIST

The official graduation list is prepared each term by the Records Office from the official Graduation Planning Sheets. Students will not be eligible to graduate unless their names appear on the list as approved by the Faculty Senate during the graduation term.

## 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 near mid 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 semester. 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.

## CLASS RANK

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

## DIPLOMAS

Diplomas are dated and awarded to graduating students each semester (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. Replacement diplomas may be issued upon a request from the original holder. Please check with the Records Office for current diploma replacement fees.

## REGISTRATION

## Advisement

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

Undeclared academic advising for continuing and new transfer students will be handled by Student Academic Services, located in Psychology, Suite 232.

All first-year, first-time students are advised through FirstYear Programs located in Occhiato University Center, Room 214.

## Registration Procedures

Details on registration procedures are published in Semester Notes in advance of each registration period.

## Payment of Tuition and Fees

Tuition and fees are assessed in accordance with approved policies. For specific information about tuition and fees visit http://www.colostate-pueblo.edu/SFS. Contact the Office of Student Financial Services at (719) 549-2753, Administration Building, Room 212 for more information.

## 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.

## Completion of Student Courses

The University holds students responsible for completing all courses for which they have enrolled unless they obtain approval for a change in registration or file an official withdrawal. Students not following proper course or University withdrawal procedures will receive failing grades.

## 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 that four days before the first birthday and a second dose of live mumps vaccine administered at least 4 weeks after the 1 st 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 exception 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. 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. Students must file an approved graduation planning sheet with the Records Office no later than the third week of the semester prior to the graduating term.

## 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 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 credits 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 only at the end of the semester 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) Students must meet all financial obligations to the institution.

## 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. Emphasis areas are not 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). 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 as well as the permission of the Provost. Successful completion of concurrent degrees will result in two diplomas and both degrees are recorded on the student's academic transcript.

## SECOND BACCALAUREATE DEGREE (DEGREE-PLUS)

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 semester 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 semester of American Sign Language.

International students for whom English is a second language may substitute two semesters 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.

Through their experiences in these areas, students develop and refine their ability to

- Participate in a variety of types of critical inquiry and thought,
- Communicate clearly and effectively,
- Investigate and understand important social issues,
- Appreciate the arts and humanities,
- Understand the histories, cultures and experiences of the diverse populations of the United States and the world, and
- Understand the influence of science and technology on social institutions and personal relations.

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:
Written Communication..... (2 courses) .................. 6 credits
Quantitative Reasoning..... (1 course)............... 3 credits

TOTAL 9 credits

## A. Written Communication

Take each of the following courses:

| ENG | 101 | Composition I....................................... 3 credits |
| :--- | :--- | :--- |
| ENG | 102 | Composition II..................... |

## B. Quantitative Reasoning

Take one of the following courses:

| 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.

## II. KNOWLEDGE COMPONENT

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

| Humanities ............ (3 courses) ........................ 9 credits |  |
| :---: | :---: |
| History.................. (1 course). | 3 credits |
| Social Sciences...... (2 courses) | 6 credits |
| Natural and Physical Sciences |  |
| 2 course | . 8 credits |

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.

Note: Courses listed below that are marked with an asterisk (*) are not in the statewide common core, meaning that they are not guaranteed in transfer to any other college or university in Colorado.

## A. Humanities

| ART | 100 | Visual Dynamics (CC) |
| :--- | :--- | :--- |
| ART | 211 | History of Art I (CC) |
| ART | 212 | History of Art II (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) |
| FL | $100^{\star}$ | Introduction to Comparative |
|  |  | Linguistics (CC) |

Foreign Language
FRN 101* Beginning Spoken French I (CC)
FRN 102* Beginning Spoken French II (CC)
FRN 201 Intermediate French I (CC)
FRN 202 Intermediate French II (CC)
GER 101* Beginning Spoken German I (CC)
GER 102* Beginning Spoken German II (CC)
GER 201 Intermediate German I (CC)
GER 202 Intermediate German II (CC)
ITL 101* Introduction to Italian I (CC)
ITL 102* Beginning Spoken Italian II (CC)
ITL 201 Intermediate Italian I (CC)
ITL 202 Intermediate 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)
SPN 201 Intermediate Spanish I (CC)
SPN 202 Intermediate Spanish II (CC)
MUS 118 Music Appreciation (CC)
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
SPCOM 103* Speaking and Listening
SPN 130 Cultures of the Spanish-Speaking World (CC)

## B. 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

ANTHR 100 Cultural Anthropology (CC) ANTHR/ ENG 106*

Language, Thought and Culture (CC)
ECON 201 Principles of Macroeconomics
ECON 202 Principles of Microeconomics
GEOG 103 World Regional Geography (CC)
MCCNM 101 Media and Society
POLSC 101 American National Politics
POLSC 200 Understanding Human Conflict (CC)
PSYCH 100 General Psychology
PSYCH 151 Intro to Human Development
PSYCH 222 Understanding Animal Behavior
PSYCH/SOC/WS 231*
Marriage, Family and Relationships
PSYCH 251* Childhood and Adolescence
SOC 101 Introduction to Sociology
SOC 201 Social Problems
SW 205 Social Welfare in the United States
WS 100* Introduction to Women's Studies (CC)

## D. Natural and Physical Sciences

BIOL 100/L Principles of Biology with Lab
BIOL 121/L Environmental Conservation with Lab
BIOL 191/L College Biology I/Botany with Lab
BIOL 192/L College Biology II/Zoology 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
EXHP 162/L* Personal Health with Lab
GEOL 101/L Earth Science 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

## III. TRANSFER STUDENTS

Colorado State University-Pueblo accepts the AA or AS degree from a regionally accredited institution as fulfilling the University's general education requirements.

Transfer students from Colorado four-year colleges or universities who have completed general education requirements with a minimum 2.30 grade point average will be considered to have fulfilled CSU-Pueblo's general education requirements. However, only courses with grades of C- or better will be accepted for credit in transfer. It is the student's responsibility to document that the general education requirements were satisfied at the transfer institution.

## IV. READMIT STUDENTS

Students readmitted to CSU-Pueblo must fulfill the requirements in the general education program in the catalog in effect at the time of readmission.

## V. 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 PROGRAM

Legislation enacted by the Colorado General Assembly requires that:

1) Institutions of higher education be held accountable for demonstrable improvements in student knowledge, capacities and skills between entrance and graduation;
2) Such demonstrable improvements be publicly announced and available;
3) Institutions express clearly to students the expectations for student performance; and
4) Such improvements be achieved efficiently through the use of student and institutional resources of time, effort and money.

Colorado State University-Pueblo, in response to the aforementioned requirement, has adopted an assessment plan which contains the following provisions:

1) The basic educational goals for all undergraduates shall be communicated to students in the form of performance expectations for all students;
2) Each department shall develop and publish specific curricular, co-curricular, and appropriate student performance expectations for students by major;
3) Information on student improvement from entrance to graduation shall be collected, used, and publicly reported;
4) Information on after-graduation performance of students shall be collected by means of surveys of graduates, employers, and graduate/professional schools;
5) Information on student and alumni satisfaction with their education shall be collected by means of surveys and interviews; and
6) Information collected for the accountability report shall be reported annually to the Board of Governors of the Colorado State University System and the Colorado Commission on Higher Education and used for the purposes of improving the quality of the educational experience at the University.

In recognition of the evolutionary nature of an accountability and assessment program, the University acknowledges that the provisions of the plan, as they are stated in this catalog, may change at any time during a student's residence. The University will make reasonable efforts to inform students of any modifications to the plan.

## Basic Educational Goals for all Undergraduates

The University requires all students to meet or exceed the following performance expectations:

## 1) Fields of Study Goals

## Major Field

Students shall demonstrate outcomes (proficiency) in the major by a variety of assessments specified by the faculty of the department offering the major. Faculty will determine and publish the expected outcomes for each major offered, and the students in the major will be provided with career planning in terms of the expected outcomes.

## Minor Field

Students shall demonstrate outcomes in the minor by a variety of assessments specified by the faculty of the department offering the minor. Faculty will determine and publish the expected outcomes for each minor offered.

## 2) Intellectual Skills Goals

## Literacy Skills

Students shall demonstrate effective skills in reading, writing, speaking and listening (public and interpersonal communication), visualizing, computing, locating and documenting sources of information.

## Quantitative Skills

Students shall demonstrate the ability to understand and interpret numerical and graphical data.

## 3) Intellectual Capacities Goals

## Problem Solving, Logical Inquiry and Critical Analysis

Students shall demonstrate the abilities of identifying, defining and solving complex problems through logical inquiry and creative exploration; engaging in critical analyses; testing hypotheses; and discriminating between observation and inference.

## Assessment of Basic Educational Goals

To assess the extent to which students meet or exceed the above performance goals, the University requires that students who have completed at least 90 credit hours be subject to interviews, portfolio maintenance, or standardized tests relative to the assessment of basic educational goals.

To assist students in preparing to meet the performance expectations stated in the basic educational goals provision of the accountability program, the faculty recommend that students:

1) Meet the institutional requirements as early as possible, preferably in the freshman year; and
2) Meet the general education requirements by the end of the sophomore year, to the extent allowed by the degree program.

## Educational Goals for Majors and Minors

Individual departments expect students to meet or exceed performance expectations as stated in each college/school section of this catalog.

Departmental assessment plans differ in accordance with requirements of specific disciplines; however, each plan typically includes the following information:

- Departmental Goals
- Expected Student Outcomes
- General Requirements
- Specific Requirements for Majors
- Co-curricular Requirements (if any)
- Outcomes Assessment Activities

In consideration of the evolutionary nature of departmental assessment plans, departments reserve the right to modify assessment plans as appropriate and necessary. Students will be notified of any such changes.

## Student Surveys

The University will conduct surveys during student attendance and for a period of five years after graduation to assess the level of educational satisfaction. Students are strongly encouraged to respond to these surveys and to provide other appropriate forms of feedback so that the University may use the results to continue to improve the quality of education at CSU-Pueblo

## Dissemination of Results

Assessment results will be disseminated by the departmental faculty in accordance with the department assessment plan; other results will be available in the Office of the Provost.

Assessment program inquiries may be directed to the Office of the Provost.

## 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 $33.6 \%$, a rate comparable with graduation rates of other regional public institutions in Colorado.

## STUDENT BILL OF RIGHTS—FOUR YEAR GRADUATION AGREEMENT

The Student Bill of Rights (also known as Colorado House Bill 01-1263) states that a student can sign a four-year graduation agreement that formalizes a plan for the student to obtain a degree in four years. Colorado State University-Pueblo supports this timeline for graduation by publishing advising guidelines under which a student may expect to graduate in four years and also publishes
curriculum check sheets defining the four-year course progression for each major. These check sheets and advising guidelines are available in each Department Office.

## 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.

## 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 four three-credit-hour courses and six credit hours of approved elective courses selected from leadership courses offered on campus.

The vision of the President's Leadership Program is to create multi-culturally 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.

## 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.

## 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.

## Admissions Criteria

Students must be admitted to Colorado State UniversityPueblo 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 High School Transcript.


## Timelines

Application materials must be postmarked and/or received by the President's Leadership Program Office or the CSUPueblo Office of Admissions by March 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:



US 160 Principles of Leadership ................................ 3
US 260 Leadership in Service Organizations ........... 3
US 360 Applied Leadership..................................... 3
US 460 Working with Experienced Leaders ............. 3
Approved Electives (minimum)......................................... 6

Students may choose from the following electives to complete the minor in Leadership Studies. Students are encouraged to diversify their selections and avoid taking six hours in one disciplinary area. Special topics courses related to leadership may also be approved on a case by case basis. Course descriptions for these classes are included in the CSU-Pueblo Catalog. Other courses may be approved; so 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.)

| 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 <br> Communication.................................. 3 |
| 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 |
| PSYCH/ |  |  |
| SOC | 352 | Social Psychology................................. 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 disciplinary area.

## 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, and Nebraska. For some sports, the members are divided into two, seven-school divisions.

In the past ten years, CSU-Pueblo has crowned 41 AllAmericans and participated in more than 20 NCAA Division II regional and national tournaments in crosscountry, volleyball, men's and women's basketball, men's golf, men's and women's tennis, baseball and softball.

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

## Rawlings Outdoors Sports Complex

The Rawlings Outdoor Sports Complex consists of tennis courts, baseball and softball fields and a soccer field. These areas are used by sports teams for training and for use by student and public groups.

## 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 semester. 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. The tuition is kept low, while quality of the program remains high. Students are offered conditional letters of acceptance into regular major programs, pending proof of language proficiency. Contact: jeanne.gibson@colostate-pueblo.edu for further information.
- Sports: International students are encouraged to participate in intramural sports offered at CSUPueblo. In addition, the CIP supports and organizes informal soccer, tennis, ping-pong and bowling teams.

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 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 your academic and 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 Center for International Programs. 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, Peterson Air Force Base, 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 apply for admission to the University. Credit courses taken through the Colorado State University-Pueblo 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, corresponddence 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 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 part-time University faculty on the high school campus.

In-house training programs are available to meet the everchanging 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 Monday through Thursday from 8:00 a.m. to 6:00 p.m. and Friday from 8:00 a.m. to 5:00 p.m. Its essential role is to serve as the primary academic bookseller and provider of supplies in support of the academic programs and events of the University community.

The CSU-Pueblo Bookstore also carries a variety of products including general books, office and art supplies, officially licensed ThunderWolves gift and apparel items, and assorted food and snack products. Computer software is available to students, faculty, and staff at educational prices. The CSU-Pueblo 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.

Customers may take advantage of $24 / 7 / 365$ shopping at the store via the CSU-Pueblo 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. Students can also save money on textbooks by taking advantage of the online "Early Bird" discount each semester: August 1-15 for Fall semester and December 1-31 for Spring semester (offer good only online).

Visa, MasterCard, and Discover credit and debit cards may be used at the bookstore and online when making
purchases. Current students, faculty, and staff may load up their campus ID cards with Thunder Bucks that can be used at the bookstore with a $10 \%$ discount on many items (textbooks, software, calculators, and markdowns excluded).

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

## FOOD SERVICE LOCATIONS

Campus food services are located all over campus for your convenience.

The Columbine Cafe is located on the main floor Occhiato University Center. This location is the primary dining option 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 below operating hours.

## Monday thru Friday

| Breakfast | $30 \mathrm{a} . \mathrm{m}$. | 9:30 a.m. |
| :---: | :---: | :---: |
| Continental | 9:30 a.m. | 11:00 a.m. |
| Lunch | 11:00 a.m. | 2:00 p.m. |
| Late Lunc | 2:00 p.m. | 5:00 p.m. |
| Dinner | 5:00 p.m. | 7:00 p. |

## Saturday and Sunday

|  |
| :---: |
|  |  |

La Cantina is located on the lower level of the Occhiato University Center and is open during 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...............7:30 a.m. - 10:00 p.m.
Friday ...............................7:30 a.m. - 5:00 p.m.

The Pavilion Store is located just west of the Hasan School of Business. The store serves as a "grab and go" type of food and drink location. The hours of operation are Monday through Friday, 7:30 a.m. - 2:00 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. - 2:00 p.m.

The Wolf Stop at the Student Recreation Center is your place for fruit smoothies, specialty coffee drinks, and other grab-and-go items. The hours are:

Monday thru Thursday............. 7:00 a.m. - 8:00 p.m.
Friday

## KTSC-TV

KTSC-TV is a non-commercial, public television station licensed to Rocky Mountain Public Broadcasting Network, Incorporated and housed in the Buell Communications Center on the campus of the Colorado State UniversityPueblo. KTSC is the regional affiliate for the Public Broadcasting Service, (PBS).

KTSC-TV serves 313,000 households with 750,000 viewers throughout southern Colorado. Rocky Mountain PBS is a statewide public television network, composed of KTSC-TV, serving the entire southern Colorado region; KRMJ in Grand Junction, serving the Western Slope; and KRMA, serving Denver and northern Colorado.

The station broadcasts 24 hours per day; with daily schedules consisting of cultural, public affairs and educational programming for viewers of all ages.

KTSC-TV produces 3 hours per week of local programming from September through May. There are additional local productions that take place during the summer months. Local programs produced by KTSC-TV include, Matchwits, Homework Hotline, Alive \& Well, and Colorado State of Mind.

There are numerous opportunities for students to become involved with KTSC-TV. Television production courses offered through the Mass Communications Department and the Center for New Media are taught at KTSC-TV. Opportunities are available for advanced students in Mass Communications and Electronics to receive academic credit for working at the station.

## 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 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 549-2189.

## 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 program 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; Career Center; Student Computer Lab; Dining Services with two different eating areas for you to select from (Columbine Café and La Cantina); Student Life; Student Health Services; International Programs; Multicultural Center; Veterans Upward Bound; Upward Bound; Student Support Services; Office of Student Activities; Affirmative Action; Student Conduct; the Library Information Commons; Interlibrary Loan Department; Reference and Circulation Desks; First-Year Center; and First-Year Advisors.

The Occhiato University Center is operated by the department of Auxiliary Services located in 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 7:00 p.m. on Friday with additional hours as required for scheduled events. The Center is open on Saturday and Sunday from 10:00 a.m. to 7:00 p.m. and for scheduled events. Limited hours are established during summer and when classes are not in session. However, the Center hours are extended to accommodate special events, conferences, and meetings.

## Identification Cards

All students enrolled should 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 ID's - new or replacement. Along with the ThunderCard comes "Thunderbucks" which can be purchased and placed on your ID card. Thunderbucks can be used for purchases of food items at any food service location on campus and to purchase anything needed in the University Bookstore (there is a $10 \%$ discount on all items except textbooks), 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 wishing 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 since parking rules are enforced by the Pueblo County Sheriff's Office located on the CSU-Pueblo Campus. Decals can be purchased in the Auxiliary Services Office throughout the year. Students living in the University Village at Walking Stick apartment complex are not required to purchase a decal unless they intend to park on campus. However, the University Village at Walking Stick requires those living there to obtain a special permit from the apartment office in order to park in their lots.

## STUDENT ACADEMIC SERVICES

## Academic Improvement Program

This program helps students on academic probation develop an individualized plan for improving their academic standing. Contact us in Psychology, Suite 232 or call (719) 549-2581.

## Disability Resource Office

The Disability Resource Office provides support and reasonable academic accommodations to students with documented disabilities. We are located in Psychology, Suite 232 or call (719) 549-2581.

## Undeclared Academic Advising for Continuing and New Transfer Students

Undeclared advising for continuing and transfer students involves assistance with appropriate course selection and information about possible majors. Career counseling and assessment tools are used to help students determine an appropriate major. We are located in Psychology, Suite 232 and can be reached at (719) 549-2581.

## 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 Psychology, Suite 232 or call us at (719) 549-2581.

## 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 Psychology, Suite 232, online at http://www.colostate-pueblo.edu/owl, or call us 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 books, periodicals, internet sources, audiovisual materials, and government documents through instruction for individuals, small groups or formal classes. Staff also prepares subject bibliographies for classes and arranges interlibrary loans.

Approximately 500,000 volumes are available, as well as access to over 15,000 periodical titles. The library's website provides access to over 75 online databases with reference information and journal articles, as well as webbased tutorials and help guides.

The University Library is a designated selective depository for U.S. Government documents. Special collections include the 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.

## 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) prior to the
first day of class. The cost of the permit is $\$ 50$ for a decal, or $\$ 75$ for a hang tag which can be transferred from one vehicle to another. Student permits expire on August 31st every year.

## FEDERALLY SPONSORED PROGRAM

## FIRST-YEAR PROGRAMS

First-Year Programs seeks to ease the transition into college life for first-year students. Our student-focused advisors assist students in any way possible that will ensure a successful first year and beyond. Advisors connect with students on a regular basis so as to prevent any difficulty from arising. A variety of resources are available such as career planning, academic skills assessments, tutoring, and various social and academic activities. The First-Year Experience Course, New Student Orientation, and Learning Communities are also offered through First-Year Programs.

## First-Year Student Advising

All first-year, first-time students are advised through FirstYear Programs. The First-Year Advising program works with 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 on the 2nd floor of the OUC and can be reached by phone at (719) 549-2584. Also, look on the web at http://www.colostate-pueblo.edu/fyp.

## New Student Orientation

New Student Orientation informs first-time students of critical campus information. Attendance at orientation is required in order to obtain your student ID and parking pass. More information is on our website at: http://www.colostate-pueblo.edu/FYP/Orientation.

## 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 Assistant Vice President for Enrollment Management. Academic policy matters affecting graduate programs and courses are reviewed by the University Graduate Studies Board. Each graduate program has a director or coordinator functioning as the person to contact for specific information. Each program is responsible for its own guidelines for graduate assistantships.

## 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 applied natural science (MSANS), industrial and systems engineering (MSISE), business administration (MBA), education (M.Ed.) and nursing (MS). In addition, the University participates in a consortial arrangement with Colorado State University (Fort Collins) for a graduate degree in English (MA). Although the latter program is offered on the CSU-Pueblo campus, the actual degree is awarded by Colorado State University (Fort Collins) and graduate regulations pertaining to the degree follow the policies of that institution.

## GRADUATE ADMISSIONS POLICIES AND PROCEDURES

A student who has received a baccalaureate degree from an accredited institution and who wishes to begin graduate courses 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 or 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 60 on the TOEFL internet-based (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 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 80 on the TOEFL internet-based (iBT), 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.

## GRADUATE ADMISSION

The student is admitted according to the following criteria approved by the program departments.

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 (see note below) from an institution accredited by the regional accreditation agency (or equivalent);
- The minimum undergraduate GPA established for the program: applied natural science - 3.000; business administration - 3.000; English 3.000, industrial and systems engineering - 3.000; nursing - 3.000; and education - 3.000 in the last 30 credits of upperdivision or graduate graded coursework.
- Submission of satisfactory scores from a standardized admissions test if required by the program department;
- A completed admissions file; and
- Any additional requirements for the selected program, including completion of leveling courses to correct undergraduate deficiencies.

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.
*Note: Admission to an approved joint degree program at CSU-Pueblo does not require a baccalaureate.

## Conditional Status

The University provides a conditional status for students whose undergraduate grade-point average is between 2.500 and the minimum required for the particular program. In addition, program departments may specify conditions, which may include higher grade-point averages, required scores on entrance examinations, or undergraduate major or course requirements as specified by the department. The Assistant Vice President for 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 performance, or outstanding professional achievement.

The Dean of Graduate Studies and Research will refer the student to an advisor appointed by the program director/coordinator. The student will be notified to meet with the advisor to determine what conditions will be applied. Departments may specify additional course work beyond the degree requirements as conditions of admission to regular status. A statement of the conditions and a plan for meeting them will be prepared by the program director/coordinator and filed with the Assistant Vice President for Enrollment Management and the dean of the college/school and a copy provided to the student.

When the conditions are met, the Assistant Vice President for Enrollment Management will notify the student that he/she has achieved regular degree-seeking status. 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 Status

The Assistant Vice President for Enrollment Management will admit the student with non-degree status under the following conditions:

1) The student requests courses for professional development only.
2) The student's record shows that he/she does not meet the qualifications for admission to a degree program with conditional or regular status. In this case, with the approval of the program director/coordinator, the Assistant Vice President for Enrollment Management will notify the student of the deficiency, the procedure to follow to become qualified and the name of an advisor who can assist the student. The advisor will be sent a copy of the notification. Students applying for admission from non-regionally accredited institutions in the United States will be included in this category. A student with non-degree status who has completed 12 hours approved by an advisor with a 3.000 GPA or better at CSU-Pueblo may petition the program director/ coordinator for a change to the regular degreeseeking status.

Students admitted with non-degree status may take, with the instructor's permission, graduate courses for which they meet prerequisites. A maximum of 12 hours taken with non-degree status may be applied toward a degree, conditional upon the approval of the student's graduate committee. However, students planning to enter the MBA Program may only apply 6 hours of graduate credit taken with non-degree status toward a degree.

## GRADUATE WORK TAKEN BY SENIORS

CSU-Pueblo students who are in their senior year of undergraduate work, and who have met the admissions requirements for the program, may take graduate courses for graduate credit (except programs with a 3+2 option, or other restrictions) with the approval of the appropriate program director/coordinator and the Assistant Vice President for Enrollment Management. Students should consult with the program director/coordinator or department responsible for the course in cases where there is not a program director/coordinator, to determine requirements or restrictions. For approved enrollment, students may take up to 12 graduate hours prior to graduation; but the combined undergraduate and graduate enrollment normally may not exceed 16 hours for a semester.

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

Note: Students planning to enter the MBA Program may only apply 6 hours of graduate credit taken as a senior toward their graduate degree.

## CHANGE OF STATUS

The Assistant Vice President for Enrollment Management will notify the student and the program director/coordinator 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 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. The MBA and industrial and systems engineering programs require a minimum of 36 semester hours. The applied natural science program requires a minimum of 30-32 semester hours. The MSN requires a minimum of 53 semester hours.
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 semester in which graduation is to occur. The deadline for submission is published in the semester schedule of courses.
6) Complete a thesis or directed research project. 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.

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. A maximum of six semester hours of thesis or directed research course work will count toward meeting graduation requirements.

## ACCEPTANCE OF TRANSFER CREDIT

A maximum of nine (9) 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 and the Assistant Vice President for 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 a degree at another institution can not be used toward fulfilling a CSU-Pueblo degree.

## GRADUATE ADVISING

Each graduate degree area has a program director/coordinator that serves as graduate advisor to all graduate students in the program, unless the dean of the college, center, or school makes a different assignment. The advisor will assist in selecting a graduate committee for each student who chooses the thesis option. The graduate committee shall consist of at least three faculty members and is appointed by the dean of the college, center or school in consultation with the student 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 program director/coordinator.

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 (9) or more hours shall be considered as full-time students (six hours, summer); those enrolled for six (6) hours shall be considered as halftime students (three hours, summer).

## TIME LIMITS

Courses completed six (6) 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 written approval of the student's graduate director/coordinator and 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 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 program director/coordinator and submitted to the Records Office.

## UNDERGRADUATE COURSES

Although undergraduate classes do not apply toward a graduate degree, students admitted to graduate study may be required to complete some undergraduate prerequisite courses in addition to their graduate work.

Courses taken for undergraduate credit by a graduate student 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 senior (400) and graduate (500) level. Students registered for graduate credit shall be 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 committee of the program involved and the Records Office.

## 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 (i.e., C or $\mathrm{C}+$ ) toward graduation requirements. Only grades of $A, B, C$, and $S$ fulfill graduation requirements for graduate programs. Graduate students may repeat a maximum of six semester hours of graduate credit. Courses in which a grade of $C$ (i.e., $C$ or $\mathrm{C}_{+}$) or better was earned may not be repeated and no course may be repeated more than once. When a course is repeated, both the subsequent grade and the original grade are included in the graduate grade point average.

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. Probationary students with 12 or more semester hours of graduate work will be dismissed whenever progress toward good standing is not demonstrated 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.

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 shall forward a recommendation through the appropriate dean to the Office of the Provost. The Provost or his/her designee shall make a 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 at the time of defense of the thesis or directed research project or at the completion of course work. 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 semester as the original examination.

## THESIS OR DIRECTED RESEARCH

Each graduate program provides an option that includes a thesis or a directed research project. This option also requires an oral defense of the thesis or research project. Each student must submit a research plan. 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 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.

## DIRECTED RESEARCH REPORT

Graduate students whose degree plan calls for a directed research project are required to submit a report on that project to their graduate committee. Although the report need not be as formal as a thesis, it must, however, be typed in an acceptable format and must include a title page comparable to thesis format.

The report should include the purpose of the study or project, limitations, sources of data, the procedure used, and a summary section with conclusions. The research report must be approved by all members of the graduate committee and the appropriate dean. The final approved report must be submitted at least five (5) days prior to the anticipated date of graduation.

## THESIS INSTRUCTIONS

Students who will be writing a thesis in partial fulfillment of graduation requirements must submit five (5) 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 or Directed Research 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 University bound copies of the thesis must be of highquality 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 typing 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 or directed research project, 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 Office of the Provost. 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 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

## APPLIED NATURAL SCIENCE (MS)

The graduate program leading to the degree of Master of Science in Applied Natural Science prepares students to apply basic scientific disciplines to the practical 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 problems.

Course work may include several important areas of applied natural science, including biotechnology, polymer chemistry, mathematical techniques in applied research, environmental concerns, and scientific information systems. A unique feature of the program is its $3+2$ plan which is described elsewhere in this catalog. It allows a student to simultaneously receive a BS and an MS degree in five years.

The Master of Science in Applied Natural Science requires 30 or 32 semester credit hours of approved graduate course work in either the thesis or non-thesis option. The program offers three emphasis areas: biological sciences, chemical sciences, and biochemical sciences.

## Degree Requirements

The course of study requires seven semester credits of work common to all students. Each student must select an emphasis area with a core of 7-11 semester credits. Six to fourteen 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 or CHEM 599) and an approved thesis. The program of study for each student must be approved by a graduate committee and the MSANS Director.

Thesis option students are required to defend their research results before a thesis defense 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 work before their graduate committee.

Program requirements are summarized as follows:


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 |
| :--- | :--- | :--- | :--- |
| ANS | 510 | Scientific Information Systems............. 1 |  |

Students must take 3 of the following 5 core courses:

| $l$ | Courses | Credits |
| :--- | :--- | :--- | ---: |
| CHEM | 501 | Advanced Organic Chemistry ............... 3 |

TOTAL 11

## Elective Courses are selected from courses listed below: (others may be added, with permission as new courses are added)

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| BIOL | 502 | Immunology |  |
| BIOL | 503 | Virology |  |
| BIOL | 512/L | Cellular Biology/Lab. | 4 |
| BIOL | 513/L | Plant Physiology/Lab |  |
| BIOL | 521/L | Histology/Lab. |  |
| BIOL | 526/L | Plant Morphology/Lab |  |
| BIOL | 532/L | Developmental Biology | ... 4 |
| BIOL | 540/L | Molecular Genetics/La | ..... 3 |


| BIOL | 541/L | Freshwater Invertebrate Zoology/ <br> Lab. $\qquad$ |
| :---: | :---: | :---: |
| BIOL | 543/L | Limnology/Lab ................................. 4 |
| BIOL | 550/L | Survey of Genomics and Bioinformatics/Lab |
| BIOL | 552/L | Advanced Microscopy/Lab.................. 4 |
| BIOL | 553/L | Ecology/Field Studies ........................ 4 |
| 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 | 584/L | Ornithology/Lab ............................... 3 |
| BIOL | 585/L | Plant Taxonomy/Lab.......................... 4 |
| BIOL | 591 | Special Topics ...............................1-4 |
| BIOL | 595 | Independent Study.........................1-4 |
| 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 | 560/L | Forensic Chemistry II/Lab................... 4 |
| CHEM | 591 | Special Topics ...............................1-4 |
| CHEM | 595 | Independent Study.........................1-4 |

## APPLIED NATURAL SCIENCE 3+2 PLAN (BS/MS)

A unique and distinct feature of our MSANS program is the $3+2$ plan. The main goal of the $3+2$ plan is to give the opportunity to qualified advanced-level undergraduate students to simultaneously pursue both the baccalaureate (BS) and the master of science (MS) degrees. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on the student's abilities and personal motivation.

Specific requirements for the $3+2$ program are included in the Masters Degree in Applied Natural Science 3+2 Plan (BS/MS) description of the College of Science and Mathematics, undergraduate programs section of this catalog.

## MASTER OF BUSINESS ADMINISTRATION (MBA)

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 front-end writing sample will be taken from all students 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. 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.

Students who fail to meet these admissions requirements may provide additional evidence of their ability to complete the program. Such evidence may include performance in leveling courses, their first two MBA courses, or other graduate coursework.

## 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 workable solutions.

3) Decision Making in a Global Business Environment

- Our graduate students will understand the global business environment.
- Our graduate students will be able to craft workable solutions for organizations that operate globally.


## 4) Ethical Analysis

- Our graduate students will be able to evaluate ethical situations and offer appropriate solutions.


## 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 College'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 Education Testing Service (ETS) Major Fields Test in Business. This test, conducted nationwide, assesses what students have learned primarily in courses common to all business majors (Areas F \& G). Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally, who have taken the exam that year.
- Course-Embedded Measures. Exams, papers, presentations, and projects are course-embedded measures that can be modified to reveal student performance data in ways that course grades might not.

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" 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 at least 3.000. The curriculum includes the following 30 credits which are taken by all candidates.

## MBA CORE



In addition, each candidate must complete the following 6 credits.

## Requirements for Option I

Approved Electives6
TOTAL PROGRAM REQUIREMENT. ..... 36
Requirements for Option II
MBA Core ..... 30
Select Two: CIS 550, 560, 561, 562, 581, 582 , or 591 ..... 6
TOTAL ..... 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.)

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 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) Conduct and interpret action research in the classroom.
3) Understand models for professional change, including teacher collaboration, professional learning communities, strategies for mentoring and coaching to facilitate change, and effective professional development.
4) 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.
5) 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 GPA in the last 30 credits of upperdivision or graduate graded coursework.
- 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 semester in which graduation is to occur. The deadline for submission is published in the Semester Notes, University Calendar, and CSUPueblo 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

## 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. Current 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 | . 3 |
| ED | 536 | Technology \& Assessment Tools. |  |
| ED | 591 | Special Topics.. | ...1-3 |

## Differentiation of Instruction

Graduate students may select from 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 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 3

## 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 aft education as well as their knowledge and skills in art history, in art theory and art evaluation, and in the materials and processes of art production.

## 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 campus-
base courses, the emphasis will include opportunities for foreign language immersion and foreign travel.

## M.Ed. (Health \& Physical Education)

Graduate Coordinator: Carol Foust, Exercise Science, Health Promotion, and Recreation Department

Students completing this area should confer with their advisor in Health and Physical Education to select courses that will expand their skills and knowledge of advanced teaching methods, professional leadership, instructional programs, research, and theories related to health and physical education.

## M.Ed. (Instructional Technology)

Graduate Coordinator: Victoria Marquesen, Teacher Education Department


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.

## 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 |
|  |  | Education............................................ 2 |
| BBE | 560 | ELL Assessment \& Administration ............. 2 |
| ED | 581 | Practicum \& Seminar in Education........... 4 |

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: Mark Hudson, Music Department
Students completing this area will complete a core of coursework covering advanced topics in standards and assessments, music literature and analysis, conducting and classroom methods, and research topics in the discipline. In addition, degree candidate will select six credits from their areas of specialization in elementary or secondary music.

## M.Ed. (Special Education)

Graduate Coordinator: Victoria Marquesen, Teacher Education Department

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ED | 512 | Teaching Diverse Learners |  |
| ED | 531 | Diverse Learners \& Technology | ...... 3 |
| RDG | 550 | Diagnosis and Remediation of Reading Problems |  |
| ED | 506 | Behavioral Support |  |
| ED | 507 | Levels of Support I. |  |
| ED | 508 | Levels of Support II |  |
| ED | 509 | Levels of Support III. |  |
| ED | 545 | Assessment \& Data Driven Instru | on...... 3 |
| ED | 510 | Collaboration in Education..... | ......... 3 |

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 UniversityPueblo'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.

## ENGLISH (M.A.)

In cooperation with Colorado State University, the Department of English and Foreign Languages offers a general program of study leading to the Colorado State University Master of Arts (M.A.) in English, comprising courses taught at Colorado State University-Pueblo. Courses are scheduled in the evenings to accommodate working professionals, with two or three courses offered each semester, including summer session. Students must be admitted to the M.A. Program before they can take any of the program courses.

## 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 study of literature in depth.
- 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.


## Specific Requirements

Student must earn a minimum of 32 semester credits (Plan A) or 35 semester credits (Plan B) and 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 or Colorado State University (Fort Collins), 21 of which must be earned after admission to the graduate program. Courses from other institutions must be approved and officially transferred and appear on the transcript. At the conclusion of the program, students must successfully complete an oral defense of the thesis or an independent study presentation.

## Plan A

Nine or ten courses selected in consultation with the advisor at the ENG 500- or ENG 600- levels, including ENG 501, ENG 600, and ENG 615 and at least two additional courses in literature and two additional courses in writing, rhetoric, and pedagogy.

| Course | Title | Credit |
| :--- | :--- | :--- |
| ENG 699 | Thesis...............................................-6 |  |

## Plan B

Eleven or twelve courses selected in consultation with the advisor at the ENG 500- or ENG 600- levels, including ENG 501, ENG 600, and ENG 615 and at least two additional courses in literature and two additional courses in writing, rhetoric, and pedagogy.

| Course | Title | Credit |
| :--- | :--- | ---: |
| ENG 695 | Independent Study $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . .2-4 ~$ |  |

## Admission Requirements

General requirements and exceptions are specified in the Colorado State University Graduate and Professional Bulletin. They include, for English, a 3.0 undergraduate grade-point average on a 4.0 scale and a Bachelor's degree in English or a broad knowledge of English and American literature. (The grade-point average requirement can be waived for applicants with five years of appropriate post-baccalaureate professional experience. See "Track II Admissions.") The Graduate Record Examination is not required. Because of necessary enrollment limitations, admission will be competitive; deferred admission is possible.

## Application Instructions

Submit the Colorado State University-Pueblo Application for Graduate Admission form, available from the Office of Admissions, together with a detailed letter of application, a 10-page writing sample, three letters of recommendation, and official copies of all college and university transcripts to:

M.A. in English Program Director<br>Department of English and Foreign Languages<br>Colorado State University-Pueblo<br>2200 Bonforte Boulevard<br>Pueblo, CO 81001-4901

## Outcome Assessment Activities

Student learning outcomes are measured as follows:

- 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 students' skills and knowledge as evidenced in their performance, and their responses are tabulated cumulatively.

The graduate faculty meets regularly to discuss the results of these measures, student progress and challenges in general, and any needed changes in policies and procedures.

## INDUSTRIAL AND SYSTEMS ENGINEERING (MS)

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.

## MSISE Degree Requirement Components

The MSISE program consists of three components. These requirements are the Core Component ( 15 credit hours), the Track Component ( 9 credit hours), and the Elective Component (9 credit hours).

## Components of a Program of Study

## Component <br> Credit Hours

Core Component............................................................ 15
Track Component............................................................. 9
Elective Component ............................................................ 9
Total Credit Hours 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 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.


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. |
| 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.

## The Thesis Option

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 a student to be awarded the MSISE degree, the student's program of study must also satisfy the following requirements. Additionally, the program of study must be approved by the MSISE Program Director.

- At least 21 credit hours must be in graduate level engineering courses.
- No more than 12 credit hours of 400 level Engineering courses may count towards the Program of Study.
- 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 semester, 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 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 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 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 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 industrial and systems engineering. This is done either by completing prerequisite background courses at CSU-

Pueblo, 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 MSISE Program Director.

## Prerequisites: (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.

## 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 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.

## MASTER OF SCIENCE WITH A MAJOR IN NURSING (MS)

The Nursing Department offers the Master of Science with a major in Nursing Degree with the following emphasis areas:

- Acute Care Nurse Practitioner Across the Lifespan
- Adult Acute Care Nurse Practitioner
- Adult Acute Care/Family Nurse Practitioner
- Adult Psychiatric Mental Health Nurse Practitioner
- Nursing Education


## Department Mission

As the Southeastern Colorado Center for Nursing Education, the Department of Nursing's mission is to prepare today's nursing student to be tomorrow's competent and caring nurse.

## 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.


## Graduate Program Goals

The program will:

- Facilitate learning to provide a foundation of knowledge and competence for advanced practice in clinical settings or nursing education.
- Support the learning needs of a diverse student population by creating a learning environment in which all are respected, nurtured, and celebrated.
- Incorporate a multi-theoretical model to provide culturally competent care for clients in a variety of settings.
- Prepare graduates to exhibit standards of excellence in practice and professional performance as they assume advanced nursing roles.
- Integrate theory and research in nursing education or clinical practice.
- Provide a regional center for graduate education that facilitates progression from Baccalaureate degree to Master's prepared nurses.


## Expected Student Outcomes

The Master of Science with a Major in Nursing is designed to prepare the graduate to:

- Demonstrate competence and caring in advanced clinical practice to improve the quality of health care that clients receive in a variety of settings.
- Synthesize and analyze advanced knowledge using theories, research, concepts, and principles from nursing, behavioral, social, physiological, and pharmacological disciplines in the area of advanced clinical practice.
- Communicate and collaborate with health care consumers, professionals, managed care, governments, and other groups to manage care and enhance the health and wellness needs of clients.
- Integrate the roles of educator, researcher, consultant, provider, leader, and manager into advanced clinical nursing practice.
- Integrate ethical and legal dimensions confronting the health care environment and the nursing profession.
- Use scientific methods to assess, analyze, and diagnose the complex clinical or non-clinical health care needs of clients, related to their wellness, health, and illness.
- Use theory and research in understanding clinical needs and in determining nursing interventions, therapeutics, and clinical management options.
- Incorporate standards of advanced nursing practice, including personal values, caring, integrity, research, and commitment to life-long learning to ensure quality of care for the client.
- Evaluate and use appropriate educational technologies and resources for making clinical decisions and promoting health maintenance and disease prevention.

Specific student outcomes for each emphasis area are based on national competency expectations including the:

1) National Organization of Nurse Practitioners Domains and Core Competencies
2) National League for Nursing Nurse Educator Competencies
3) National Association of Clinical Nurse Specialists Core Competencies

## Graduate Admissions Policies and Procedures

Students are responsible for following all graduate admissions policies and procedures as outlined in the Graduate Program section of this catalog. Admission status will be categorized as:

## Regular Status

The student has:

1) A baccalaureate degree in nursing from an institution accredited by the regional accreditation agency (or equivalent).
2) Completed a three credit hour statistics course with a C (C- will not be accepted).
3) Two years experience as a registered nurse. For the acute care and/or family emphasis the experience must be in acute care as a registered nurse.

## Conditional Status

Conditional status will be given to graduate nursing degree-seeking students per the published Graduate Program section of this catalog.

## Non-Degree-Seeking Status

Non-degree status will be given to students per the published Graduate Program section of this catalog. In addition to the published policies, students must have a bachelor's degree in nursing.

## Graduate Work Taken by Senior

Students are responsible for all policies as outlined in the Graduate Program section of this catalog.

## Graduate Nursing Program Application Process

The following must be submitted to the nursing program prior to completing 9 graduate nursing course credits:

1) CSU-Pueblo Department of Nursing Master of Science with a Major in Nursing Application.
2) Proof of a current Colorado Registered Nursing license or eligibility for license.
3) Certification in Advanced Cardiac Life Support (ACLS) is required for all emphases. The Pediatric Advanced Life Support Certification (PALS) is also required for the Acute Care Nurse Practitioner Across the Life Span and the Adult Acute Care/Family Nurse Practitioner.
4) Current physical examination within the last year and current immunization records. This includes the hepatitis B series, 2 step TB test, and measles, mumps, and rubella.
5) Three letters of recommendation: one academic, one clinical, and one other.
6) Letter of intent to the Nursing Department including a brief history of self, reason for pursuing an advanced practice degree, and how applicant will accommodate for studies.
7) Curriculum vitae utilizing the CSU-Pueblo template available on the Department of Nursing website.
8) Proof of professional liability advanced practice insurance.
9) Criminal history background check clearances are required in Colorado. Any residency outside of the state of Colorado over the past three years must be verified by an official criminal history background check.
10) Drug screen must be completed after admission to the University.

## Graduation Requirement

Graduate degrees will be granted to candidates who meet all of the published requirements plus the additional requirements below:

1) Students must have a cumulative graduate GPA of 3.000 or better at graduation. All courses must be passed with a B or better. Anything less than a B will not be applied toward graduation. A maximum number of nine semester hours of transfer credit may be applied to the degree. Grades of B- are not accepted.
2) Students must complete the program's minimum number of hours of approved course work.
3) Students must pass a final comprehensive and oral examination in their major area of study in the nonthesis option.
4) Students choosing the thesis option must 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. In addition an oral defense is required.
5) Students choosing the directed research project will be overseen by a chairperson. The project parameters, outcomes, and timeline must be approved by the chairperson. Formal presentation will be required. Three copies of the project must be distributed as following: one to the program director/coordinator, one to the project chairperson, and one to the nursing department.

## Acceptance of Transfer Credit

Transfer credit will be awarded per the published Graduate Program section of this catalog. Credit will be awarded for a course in which a grade of B or better was earned. Grades of B- are not accepted. Nine graduate credit hours can be transferred in from an accredited institution with approval of the graduate program coordinator.

## Time Limits

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 student's graduate program coordinator and associate dean. Fulltime degree plans are provided in the following sections. Part-time degree plans may also be available. Degree plans are developed by students and their graduate advisor or graduate program coordinator.

## Academic Standards

Students are responsible for all academic standards policies per the published Graduate Program section of this catalog. In addition to those policies, the following applies:

1) Only grades of $B$ or better and $S$ fulfill graduation requirements for the nursing graduate program.
2) Courses in which a grade of $B$ (not a B-) or better was earned may not be repeated and no course may be repeated more than once.

## Master of Science with a Major in Nursing

## Nursing Core Courses

All Master's students will complete the following core requirements for graduation. The credit hour ratio for clinical or lab is 1 credit hour to 4 contact hours. The core courses may be offered in a hybrid format. The hybrid format involves on campus and Web based instruction. The core courses include the following:

| Spring |  |
| :---: | :---: |
| Courses | Titles Credits (lecture-lab) |
| NSG 506 | Roles, Policy \& Issues .................. 3(2.5-2) |
| NSG 508 | Advanced Practice Theory ................ 3(3-0) |
| NSG 592 | Research ...................................... 3(3-0) |
| Summer |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 551 | Health and Well Being ..................... 3(2-4) |
| Fall |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 552 | Advanced Pathophysiology..............3(3-0) |
| NSG 561 | Advanced Pharmacology ................. 3(3-0) |
| NSG 562 | Advanced Assessment .................... 3(2-4) |

## Core Graduate Nursing Courses

21 total credits (18.5-10)

## Emphasis Specific Courses and Electives

Each emphasis area has specific courses that are required to meet graduation requirements for that emphasis. These courses may also qualify as electives for other emphasis areas.

## Courses Titles Credits (lecture-lab)

NSG 550 Health Policy \& Finance..................... 3(3-0)
NSG 571 Healthcare Informatics ........................ 3(3-0)
NSG 575 Curriculum Development ................... 2(2-0)
NSG 576 Teaching \& Instruction in Nursing ...... 4(4-0)

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NSG 588 Management of Pediatric Clients ...... 4(2-8)
NSG 591 Special Topics.
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$\qquad$

``` 1-6 Varies
```


## Nursing Synthesis of Knowledge Courses

All students must choose a method of synthesizing their knowledge either through applied research (directed research or thesis) or through synthesis experience courses (non-thesis). Each emphasis has an identified minimum thesis or non-thesis requirements (see specific emphases). The synthesis of knowledge courses must be taken after completion of the core courses. For students choosing the non-thesis track, multiple synthesis experience courses are available. Students are to meet with their graduate advisor for planning their synthesis of knowledge options.

Students will choose synthesis option courses based on the specific program emphasis.

| Courses |  | Titles Credits (lecture-lab) |
| :---: | :---: | :---: |
| NSG | 581 | Synthesis: Psych Mental Health |
|  |  | NSG I .......................................... 8(4-16) |
| NSG | 582 | Synthesis: Psych Mental Health |
|  |  | NSG II ........................................ 8(4-16) |
| NSG | 583 | Synthesis Experience: Educator ...... 9(3-24) |
| NSG | 584 | Synthesis Experience: Family ......... 9(3-24) |
| NSG | 585 | Acute/Chronic/Emergent |
|  |  | Health Needs I .............................. 8(4-16) |
| NSG | 586 | Acute/Chronic/Emergent |
|  |  | Health Needs II ............................. 8(4-16) |

## Thesis Option

This option is available for all emphasis areas.

| Courses | Titles Credits (lecture-lab) |
| :--- | :--- | :--- |
| NSG 593 | Thesis/Project Seminar..................... 3(3-0) |
| NSG 599 | Thesis (minimum of three <br> credit hours required)........................Varies |

## Project Option

This option is available in all emphasis areas.

## Courses Titles Credits (lecture-lab)

NSG 593 Thesis/Project Seminar.......................3(3-0)
NSG 590 Special Projects (minimum of three
credit hours required) .........................Varies

## Non-Thesis/Project Option

Six to nine credits of approved electives must be selected. This option is available to all emphasis areas except the Nurse Education Emphasis.

## Acute Care Nurse Practitioner Across the Lifespan Emphasis

The Acute Care Nurse Practitioner (ACNP) emphasis is unique in its focus on providing care across the lifespan. The ACNP provide care in settings such as emergency rooms and intensive care areas; the preparation and focus of this program is for the graduate to be able to provide care to patients of any age. This is an intensive program in which the full-time student is expected to complete the coursework and clinical experiences in five semesters. A minimum of 4 contact hours to 1 credit hour or 660 hours of clinical practice will be required to prepare graduates to manage acute health problems for patients across the lifespan. Clinical experiences will be provided with preceptors in a variety of acute care and community settings, which are selected to allow students to work in milieus devoted to particular patient groups, levels of care, or treatment modalities in which they have a desire to specialize. The graduate will meet the following requirements for the Acute Care Nurse Practitioner certification:

| Spring |  |
| :---: | :---: |
| Courses | Titles Credits (lecture-lab) |
| NSG 506 | Roles, Policy \& Issues .................. 3(2.5-2) |
| NSG 508 | Advanced Practice Theory............... 3(3-0) |
| NSG 571 | Healthcare Informatics ..................... 3(3-0) |
| NSG 592 | Research ...................................... 3(3-0) |
| Summer |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 550 | Health Policy \& Finance................... 3(3-0) |
| NSG 551 | Health and Well Being .................... 3(2-4) |
| Fall |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 552 | Advanced Pathophysiology............... 3(3-0) |
| NSG 561 | Advanced Pharmacology ................. 3(3-0) |
| NSG 562 | Advanced Assessment .................... 3(2-4) |
| Spring |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 585 | Acute/Chronic/Emergent Health |
|  | Needs I ....................................... 8(4-16) |
| NSG 588 | Management of Pediatric Clients ....... 4(2-8) |
| Summer |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 586 | Acute/Chronic/Emergent Health |
|  | Needs II ...................................... 8(4-16) |
| ACNP |  |
| Core Courses.......................... 21 total credits (18.5-10) |  |
| Synthesis of Knowledge....................... 16 total credits |  |
| ACNP Courses............................. 10 credit hours (8-8) |  |
| Thesis/Project/Electives ......................... 6 total credits |  |

Total Credit Hours $\qquad$ 53 credit hours Clinical Contact Hours $\qquad$ 660 clinical contact hours Lab Contact Hours $\qquad$ 90 lab contact hours

## Adult Acute Care Nurse Practitioner Emphasis

The Adult Acute Care Nurse Practitioner (AACNP) emphasis prepares student to provide care to adult clients. This is an intensive program in which the full-time student is expected to complete the coursework and clinical experiences in five semesters. A minimum of 540 hours of clinical practice are required to prepare graduates to manage acute health problems for adult clients. Clinical experiences are provided with preceptors in a variety of acute care settings, selected to allow students to work in milieus devoted to particular patient groups, levels of care, or treatment modalities in which they have a desire to specialize. The student will be able to take the Acute Care Nurse Practitioner certification examination following graduation. The following courses are required for this emphasis:

## Spring

|  |  | Titles | Credits (lectu |
| :---: | :---: | :---: | :---: |
| NSG | 506 | Roles, Policy \& | 3(2.5-2) |
| NSG | 508 | Advanced Practice T | eory ............... 3(3-0) |
| NSG | 571 | Healthcare Inform | 3(3-0) |
| NSG | 592 | Research |  |


| Summer |  |
| :---: | :---: |
| Courses | Titles Credits (lecture-lab) |
| NSG 551 | Health and Well Being......................3(2-4) |
| NSG 550 | Health Policy \& Finance ................... 3(3-0) |
| Fall |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 552 | Advanced Pathophysiology..............3(3-0) |
| NSG 561 | Advanced Pharmacology ................. 3(3-0) |
| NSG 562 | Advanced Assessment....................3(2-4) |
| Spring |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 585 | Acute/Chronic/Emergent Health |
|  | Needs I......................................... 8(4-16) |
| Summer |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 586 | Acute/Chronic/Emergent Health |
|  | Needs II....................................... 8(4-16) |

## AACNP

## Core Courses

21 total credits (18.5-10)
Synthesis of Knowledge $\qquad$ 16 total credits
AACNP Courses $\qquad$ 6 credit hours (6-0)
Thesis/Project/Electives $\qquad$ 6 total credits

Total Credit Hours. $\qquad$ 49 credit hours Clinical Contact Hours.......... 540 clinical contact hours Lab Contact Hours $\qquad$ 90 lab contact hours

## Adult Acute Care/Family Nurse Practitioner Emphasis

The Adult Acute Care/Family Nurse Practitioner (AACNP/FNP) emphasis focuses on primary care and acute care, especially for rural and underserved populations. Graduates will be eligible for certification as an Acute Care Nurse Practitioner and a Family Nurse Practitioner through the American Nurses' Credentialing Center (ANCC) and/or the American Academy of Nurse Practitioners (AANP). Students are responsible for determining any additional requirements for certification and eligibility to practice in a state outside of Colorado.

This emphasis combines the theory courses for both Family Nurse Practitioner (FNP) and Adult Acute Care Nurse Practitioner (AACNP) emphases. The student who chooses this emphasis is required to take an additional 9 credit hours of Synthesis Experience (see below) to allow additional time for synthesis of primary care theory and application in primary care clinical settings. A minimum of 1020 hours of clinical practice is required. The full-time student is expected to complete the following coursework and clinical experience in six semesters:

## Spring

|  |  | Titles | Credits (lecture-lab) |
| :---: | :---: | :---: | :---: |
| NSG | 506 | Roles, Policy \& | 3(2.5-2) |
| NSG | 508 | Advanced Practice T | ory ................ 3(3-0) |
| NSG | 571 | Healthcare Informatic | . 3(3-0) |
| NSG | 592 | Research | 3(3-0) |


| Summer |  |
| :---: | :---: |
| Courses | Titles Credits (lecture-lab) |
| NSG 550 | Health Policy \& Finance................... 3(3-0) |
| NSG 551 | Health and Well Being ..................... 3(2-4) |
| Fall |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 552 | Advanced Pathophysiology.............. 3(3-0) |
| NSG 561 | Advanced Pharmacology ................. 3(3-0) |
| NSG 562 | Advanced Assessment .................... 3(2-4) |
| Spring |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 585 | Acute/Chronic/Emergent Health |
|  | Needs I ....................................... 8(4-16) |
| NSG 588 | Management of Pediatric Clients ....... 4(2-8) |


| Summer |  |
| :---: | :---: |
| Courses | Titles Credits (lecture-lab) |
| NSG 586 | Acute/Chronic/Emergent Health |
|  | Needs II....................................... 8(4-16) |
| Fall |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 584 | Synthesis Experience: Family ......... 9(3-24) |
| AACNP/FNP |  |
| Core Courses......................... 21 total credits (18.5-10) |  |
| Synthesis of Knowledge....................... 25 total credits |  |
| AACNP/FNP Courses .................... 10 credit hours (8-8) |  |
| Thesis/Project/Elective ........................... 6 total credits |  |
| Total credit hours ................................ 62 credit hours |  |
| Clinical Contact Hours....... 1020 clinical contact hours |  |
| Lab Contac | Hours ....................... 90 lab contact hours |

## Adult Psychiatric Mental Health Nurse Practitioner Emphasis

The Adult Psychiatric Mental Health Nurse Practitioner Emphasis focuses on the application of advanced nursing practice competencies to provide assessment, diagnosis, and management of the psychiatric mental health population. The content of the program prepares the graduate to practice as an Advanced Practice Registered Nurse and to meet the educational requirements for American Nurses' Credentialing Center (ANCC) Certification.

A minimum of 540 hours of clinical practice is required. The full-time student is expected to complete the following coursework and clinical experience in five semesters.

| Spring |  |
| :---: | :---: |
| Courses | Titles Credits (lecture-lab) |
| NSG 506 | Roles, Policy \& Issues................... 3(2.5-2) |
| NSG 508 | Advanced Practice Theory ............... 3(3-0) |
| NSG 571 | Healthcare Informatics ..................... 3(3-0) |
| NSG 592 | Research......................................3(3-0) |
| Summer |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 550 | Health Policy \& Finance ................... 3(3-0) |
| NSG 551 | Health and Well Being.....................3(2-4) |
| Fall |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 552 | Advanced Pathophysiology ..............3(3-0) |
| NSG 561 | Advanced Pharmacology ................. 3(3-0) |
| NSG 562 | Advanced Assessment....................3(2-4) |


| Spring |  |
| :---: | :---: |
| Courses | Titles Credits (lecture-lab) |
| NSG 581 | Synthesis: Psych Mental Health |
|  | NSG I.......................................... 8(4-16) |
| NSG approved elective ....................................... 2(2-0) |  |
| Summer |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 582 | Synthesis: Psych Mental Health |
|  | NSG II........................................ 8(4-16) |
| Core Courses.......................... 21 total credits (18.5-10) |  |
| Synthesis of Knowledge....................... 16 total credits |  |
| Emphasis Specific Courses ............ 8 credit hours (8-0) |  |
| Thesis/Project/Electives ........................ 6 total credits |  |
| Total Credit Hours............................... 51 credit hours |  |
| Clinical Contact Hours......... 540 clinical contact hours |  |
| Lab Contact Hours ....................... 90 lab contact hours |  |

## Nursing Education Emphasis

Nursing Education Emphasis focuses on the application of education competencies to provide a balanced approach to instruction in both the academic and clinical milieus. The content of the program prepares the graduate to meet the educational requirements for National League for Nursing (NLN) Certification as a Certified Nurse Educator. Students are responsible for determining any additional requirements for certification and eligibility to practice in this role.

A minimum of 420 hours of clinical/teaching contact hours is required. The full-time student is expected to complete the following coursework and clinical experience in four to six semesters. The two additional semesters are allowed in order to complete the thesis/project requirements.

The Nursing Education Emphasis requires either the thesis option or the project option. Students are required to take NSG 593 (Thesis/Project Seminar) and then depending on their option, 3 credits of either NSG 590 (Special Projects) or NSG 599 (Thesis Research).

## Spring

Courses Titles Credits (lecture-lab)
NSG 506 Roles, Policy \& Issues .................... 3(2.5-2)
NSG 508 Advanced Practice Theory................. 3(3-0)
NSG 592 Research .......................................... 3(3-0)

## Summer

Courses Titles Credits (lecture-lab)
NSG 551 Health \& Well Being............................3(2-4)
NSG 575 Curriculum Development ................... 2(2-0)
NSG 576 Teaching \& Instruction in Nursing ......... 4(4-0)

| Fall |  |
| :---: | :---: |
| Courses | Titles Credits (lecture-lab) |
| NSG 552 | Advanced Pathophysiology .............. 3(3-0) |
| NSG 561 | Advanced Pharmacology .................. 3(3-0) |
| NSG 562 | Advanced Assessment....................3(2-4) |
| Spring |  |
| Courses | Titles Credits (lecture-lab) |
| NSG 571 | Healthcare Informatics .....................3(3-0) |
| NSG 583 | Synthesis Experience: Educator ...... 9(3-24) |
| Core Courses......................... 21 total credits (18.5-10) |  |
| Synthesis of Knowledge......................... 9 total credits |  |
| Emphasis Specific Courses ............ 9 credit hours (9-0) |  |
| Thesis/Project....................................... 6 total credits |  |
| Total Credit Hours ............................... 45 credit hours |  |
| Clinical/Teaching Contact Hours .................. 420 hours |  |
| Lab Contact Hours ....................... 90 lab contact hours |  |

## Post Masters Certification

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 at least 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.

## HISTORY (M.A.)

The Department of History offers a general program of study leading to a Master of Arts (M.A.) in History. The graduate program will have the following emphasis areas:

## General History

This emphasis is designed for students with a general interest in history or those who wish to enter a Ph.D. Program

## Teaching

This emphasis is designed for working educators or people who hope to become teachers.

## Public History

This emphasis is designed for those people working in or who want to enter a public history field.

## 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.


## 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 15 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 Department Chairman (with the advice 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 emphasis area chosen.
- Submit a Graduation Planning Sheet during the semester prior to the semester in which graduation is to occur. The deadline for submission is published in the Semester Notes, University Calendar, and CSUPueblo Catalog.


## Specific Requirements for the General History Emphasis

Students with a General History emphasis must complete an M.A. thesis to receive their degree.

| Courses | Titles | Credits |
| :--- | :--- | ---: |
| HIST 501 | Historical Studies................................... 6 |  |
| HIST 505 | Historiography and Theory ............................................................................................... 12 |  |

TOTAL 30

Up to six credits can be replaced with courses numbered from HIST 503-505 with the permission of the graduate director.

## Specific Requirements for the Teaching Emphasis

Students in the Teaching emphasis 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 501 | Historical Studies ..................................... 9 |  |
| HIST 505 | Historiography and Theory.................. 3 |  |

TOTAL 30

## Specific Requirements for the Public History Emphasis Area

Students in the Public History emphasis will be encouraged to take an examination instead of the thesis option.
Courses Titles Credits
HIST 502 Museum Management ..... 3
HIST 503 Archival Administration. .....  3
HIST 504 Historic Preservation. .....  3
HIST 509 Seminar in Public History. .....  3
HIST 598 Internship. ..... 6
HIST
HIST 599 Thesis Research (last semester)
OR
HIST 510 Directed study for Prelim Exams(last semester)3

## COLLEGE OF EDUCATION, ENGINEERING, AND PROFESSIONAL STUDIES

## Dr. Hector Carrasco, Dean

## Academic Departments

## Automotive Industry Management and Engineering Technology

Majors: Automotive Industry Management (BS)
Civil Engineering Technology (BSCET)
Minor: Automotive Industry Management

## Engineering

Majors: Engineering (BSE)
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: Exercise Science, Health Promotion and Recreation (BS)
Emphasis Areas:
Athletic Training
Community/Commercial Recreation
General Exercise Science
Health Promotion/ Wellness
K-12 Physical Education Teacher Preparation
Outdoor Leadership
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Minors: Coaching
Exercise Science and Health Promotion Fitness and Recreational Sports Management Recreation

## Nursing

Major: $\quad$ Nursing (BSN)
Nursing (MS)
(See Graduate Programs section of catalog) Emphasis Areas:

Acute Care Nurse Practitioner Across the Lifespan
Adult Acute Care Nurse Practitioner
Adult Acute Care/Family Nurse Practitioner Adult Psychiatric Mental Health Nurse Practitioner
Nursing Education

| Major: Education (M.Ed.) <br> (See Graduate Programs section of catalog) Emphasis Areas: <br> Art Education <br> Foreign Language <br> Health \& Physical Education <br> Instructional Technology <br> Linguistically Diverse Education <br> Music Education <br> 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 AUTOMOTIVE INDUSTRY MANAGEMENT AND ENGINEERING TECHNOLOGY 

Department Chair: Sylvester A. Kalevela

# AUTOMOTIVE INDUSTRY MANAGEMENT PROGRAM 

Program Coordinator: Cathi J. Robbe
Faculty: Darby, Robbe
The major in automotive industry management leads to a Bachelor of Science (BS) Degree and is designed to prepare its 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, 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.


## Expected Student Outcomes

Upon successful completion of the AIM curriculum, the graduate should:

- Possess technical knowledge and understanding of various automotive systems-engines, suspension and brakes, power trains and drive lines, fuel and emissions, electrical and electronic...
- Possess knowledge and understanding of the operation and management of the automotive parts business-financial systems, computerized management and inventory control systems, customer relations, environmental regulations...
- Possess knowledge and understanding of general business operations-courses taken within the Hasan School of Business that comprise a minor in Business Administration, plus additional selected courses.


## General Requirements for the AIM Program

- AIM majors are required to complete an approved curriculum with a minimum grade of $C$ (2.00) 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 $C$ (2.00) earned in all minor courses having an AIM prefix.


## Specific Requirements for the AIM Major

|  | rses | Titles Credits |
| :---: | :---: | :---: |
| AIM | 105 | Intro to the Parts \& Service Industry ..... 1 |
| AIM | 115 | Automotive Engine Design, Operation and Repair . $\qquad$ |
| AIM | 125/L | Automotive Suspension \& Brake Systems/Lab. $\qquad$ |
| AIM | 155 | Automotive Parts Operations.............. 4 |
| AIM | 165/L | Automotive Power Trains \& Drive 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 <br> Regulatory Issues. $\qquad$ |
| AIM | 325 | Fuels and Lubricant Production, Marketing and Conservation. .. 3 |
| AIM | 335 | Automotive Shop Practices ................ 5 |
| AIM | 345 | Advanced Automotive Systems ........... 5 |
| AIM | 405 |  <br> Techniques. $\qquad$ |
| AIM | 425 | Automotive Financial Management ...... 5 |

TOTAL 59

## Other Required Courses

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| ACCTG | 201 | Principles of Financial Accounting ....... 3 |
| ACCTG | 202 | Principles of Managerial Accounting..... 3 |
| BUSAD | 302 | Ethics in Business............................. 3 |
| CIS Course(s) |  | Guided Electives.................................... 2 |
| ECON | 201 | Principles of Macroeconomics ............. 3 |
| ECON | 202 | Principles of Microeconomics .............. 3 |
| FIN | 330 | Principles of Finance ......................... 3 |
| MGMT | 201 | Principles of Management .................. 3 |
| MGMT | 311 | Operations and Quality Management ... 3 |
| MGMT | 318 | Human Resource Management ........... 3 |
| MKTG | 340 | Principles of Marketing ...................... 3 |
| MATH | 156 | Intro to Statistics ............................... 3 |
| SPCOM | 103 | Speaking and Listening ...................... 3 |

TOTAL 38
AIM majors are required to complete the business courses required by the major but not included in the BUSAD minor with a grade point average of 2.0 (C).

## 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.

## Specific Requirements for the AIM Minor

| AIM Courses | Titles <br> Automotive Engine Design, <br> AIM <br> Operation and Repair ........................ 5 |  |
| :--- | :---: | :--- |
| AIM | $235 / \mathrm{L}$ | Automotive Fuel Systems and <br> Aut <br> Exhaust Emissions/Lab ....................... 4 |
| AIM | $245 / L$ | Automotive Electrical Systems I/Lab.... 4 |
| Approved AIM Electives (min) ........................................ 7 |  |  |

TOTAL 20

## Outcomes Assessment Activities

- The program will keep a portfolio for each AIM major and minor containing a record of achievement, showing improvement in intellectual skills, knowledge and capacities between entrance and graduation.
- Required courses are monitored to assure that quality of content and delivery is maintained to a high standard.
- A National Advisory Committee meets to assess and offer advice to the program faculty and students regarding the quality of the AIM program.
- Graduate placement within the area of study is monitored.


# CIVIL ENGINEERING TECHNOLOGY PROGRAM 

Program Coordinator: Sylvester A. Kalevela<br>Faculty: Bailey, 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 Technology Accreditation Commission of ABET, 111 Market Place, Suite 050, Baltimore, MD 21202, Telephone: (410) 347-7700.

## Program Goals

The goal of the Civil Engineering Technology (CET) program at Colorado State University-Pueblo is to provide an integrated educational experience so that its graduates:

- Are competent in solving civil engineering problems, meet the needs of industry, and become successful individuals as civil engineering practitioners and in endeavors outside the field of civil engineering;
- Have sufficient knowledge and understanding of the principles of engineering sciences, mathematics, engineering graphics, and computer applications that provide the foundation of the civil engineering technology and on which they can continue to build their technical knowledge and expertise; and
- Have a quality general education including literature, humanities, and social sciences to help them become well-rounded individuals and committed to sustaining a life-long pursuit of knowledge, continuous improvement and professional success.

An additional program goal is to maintain accreditation as defined by the Technology Accreditation Commission of ABET.

## Program Focus

The 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) are competent to function as construction project managers.

The civil engineering technology curriculum places emphasis on hands-on experience obtained through laboratory activities that include: (a) testing construction materials, (b) developing technical solutions to problems
using established engineering analysis and design principles, (c) performing cost and economic analyses of technical solutions, and (d) developing plans and schedules for construction projects.

## Expected Student Outcomes

## General Requirements

- Students are required to complete an approved program of study with a cumulative GPA of 2.000 or better in their 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 senior-year technical project requiring an oral and written presentation.


## Specific Requirements for the CET Major

CET graduates are expected to have the appropriate skills in engineering surveying and drafting. In addition, they should have knowledge of basic construction materials along with the fundamentals of engineering mechanics, water systems, transportation systems, and structural analysis and design. The CET curriculum consists of courses listed under the following 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

| $l l$ | 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

| Courses |  | 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 | Construction Cost Estimating II ........... 3 |
| CET | 315 | Soil Mechanics Technology ................ 3 |
| CET | 317 | Hydraulics....................................... 3 |
| CET | 316 | Structural Analysis............................ 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.)


## 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), and (c) History and Social Sciences (9 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 |

## Freshman - Spring

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| CET | 103 | Surveying II |  |
| CET | 116 | Civil Drafting II |  |
| ENG | 101 | Composition I |  |
| MATH | 124 | Pre-Calculus Mat |  |
| General | du | : Humanities |  |

CET 116 Civil Drafting II ........................................ 3
ENG 101 Composition I .......................................... 3
MATH 124 Pre-Calculus Math.................................. 5
General Education: Humanities......................................... 3

## Sophomore - Fall

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | ---: |
| CET | 202 | Statics ................................................ 3 |  |
| CET | 207 | Construction Materials \& Methods......... 3 |  |
| CET | 226 | Engineering Problem Solving ................ 2 |  |
| MATH | 126 | Calculus \& Analytic Geometry I........... 5 |  |
| PHYS | $201 /$ L | Principles of Physics I/Lab ............... 4 |  |

TOTAL 17

## Sophomore - Spring

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | ---: |
| CET | 206 | Strength of Materials .......................... 4 |  |
| CET | 208 | Crencret |  |

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 |
| :--- | :--- |
| CET | Credits |

CET 305 Construction Cost Estimating II ............. 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 ..... 1
CET 473 Highway Design .....  3
CET Elective ..... 3
General Education: History ..... 3

## Senior - Spring

Courses
CET 404 Structural Steel Design
Credits .....  3
CET 456 Senior Project
Technical Elective ..... 3
CET Elective ..... 3
TOTAL ..... 12
Total required credit hours124

## DEPARTMENT OF ENGINEERING

## Department Chair: Jane M. Fraser

Faculty: Bloxsom, Carrasco, DePalma, Fraser, Jaksic, 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 Industrial and Systems Engineering (MS),
- The Pre Engineering program,
- The Minor in Engineering, and
- The Minor in Industrial Engineering.

The BSE-Mechatronics is a 4-year program that can be completed at CSU-Pueblo. 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 the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202, telephone: (410) 347-7700. 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, 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.

## BSE-MECHATRONICS

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,
- An ability to function on and lead 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 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

| EN 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 I............................ 3 |
| EN | 324/L | Material Science and |
|  |  | Engineering/Lab ............................... 4 |
| EN | 343 | Engineering Economy ....................... 3 |
| EN | 360 | Control Systems I ............................. 3 |
| EN | 361 | Digital Electronics ............................. 4 |
| EN | 362 | Introduction to Mechatronics............... 3 |
| EN | 363 | Virtual Machine Design....................... 3 |
| EN | 365 | Stochastic Systems Engineering ......... 4 |
| EN | 430 | Project Planning and Control............... 3 |
| EN | 441 | Engineering of Manufacturing |
|  |  | Process .......................................... 4 |
| EN | 443 | Quality Control and Reliability............. 3 |
| EN | 460 | Control Systems II ............................. 3 |
| EN | 462 | Industrial Robotics ............................. 3 |
| EN | 473 | Computer Integrated Manufacturing ..... 3 |
| EN | 488 | Engineering Design Projects .............. 3 |
| EN | 493 | Senior Seminar................................. 2 |

TOTAL 80

## Other Required Courses

| Courses | Titles |  |
| :--- | :--- | :--- |
| MATH | 126 | Calculus \& Analytic Geometry I ........... 5 |
| MATH | 224 | Calculus \& Analytic Geometry II .......... 5 |

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 |  |



TOTAL 30

## Junior Year

$\begin{array}{lll}\text { Courses } & \text { Titles } & \text { Credits } \\ \text { EN } 321 & \text { Thermodynamics } & \end{array}$
EN 343 Engineering Economy............................ 3
EN 360 Control Systems I ................................. 3
EN 361 Digital Electronics ................................. 4
EN 362 Introduction to Mechatronics................. 3
EN 363 Virtual Machine Design......................... 3
EN 365 Stochastic Systems Engineering .......... 4
EN 441 Engineering of Manufacturing
Processes............................................. 4
EN 443 Quality Control and Reliability............... 3
SPCOM 103 Speaking and Listening ........................ 3
TOTAL 33

## Senior Year

## Courses

## Titles

## Credits

EN 430 Project Planning and Control................. 3
EN 460 Control Systems II ................................. 3
EN 462 Industrial Robotics ................................ 3
EN 473 Computer Integrated Manufacturing ..... 3
EN 488 Engineering Design Projects ................. 3
EN 493 Senior Seminar...................................... 2
Technical Electives............................................................. 6
General Education............................................................ 12

TOTAL 35

## 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 achieve or improve efficiency, quality, and safety;
- An ability to function on and lead 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 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

| EN 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 | 215 | Introduction to Industrial and Systems Engineering $\qquad$ |
| EN | 231/L | Circuit Analysis I/Lab ......................... 5 |
| EN | 321 | Thermodynamics I ............................ 3 |
| EN | 324/L | Material Science \& Engineering/Lab..... 4 |
| EN | 343 | Engineering Economy........................ 3 |
| EN | 365 | Stochastic Systems Engineering ......... 4 |
| EN | 420 | Simulation Experiments ...................... 4 |
| EN | 430 | Project Planning and control............... 3 |
| EN | 439 | Time and Motion Studies .................... 2 |
| EN | 440 | Safety Engineering ............................ 3 |
| EN | 441 | Engineering of Manufacturing |
|  |  | Processes........................................ 4 |
| EN | 443 | Quality Control and Reliability.............. 3 |
| EN | 471 | Operations Research......................... 3 |
| EN | 473 | Computer Integrated Manufacturing...... 3 |
| EN | 475 | Facility, Planning and Design .............. 3 |
| EN | 477 | Operations Planning and Control......... 3 |
| EN | 488 | Engineering Design Projects .............. 3 |
| EN | 493 | Senior Seminar................................ 2 |
| Technical Electives..................................................... 6 |  |  |

## TOTAL 77

## Other Required Courses

| 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 | 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... | ... 3 |

ENG 102 Composition II. ..... 3
SPCOM 103 Speaking and Listening ..... 3
General Education ..... 15
TOTAL ..... 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

| Course |  | itles 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 1........... 5 |
| MATH | 224 | Calculus \& Analytic Geometry II.......... 5 |
| PHYS | 221/L | General Physics I/Lab ...................... 5 |
| Gene |  |  |

TOTAL
31

## Sophomore Year

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| EN | 211 | Engineering Mechanics I | 3 |
| EN | 212 | Engineering Mechanics II | 3 |
| EN | 215 | Introduction to Industrial and |  |
|  |  | Systems Engineering.. |  |
| EN | 231/L | Circuit Analysis I/Lab ...... | 5 |
| EN | 324/L | Material Science and |  |
|  |  | Engineering/Lab | .... 4 |
| PHYS | 222/L | General Physics II/Lab ... | .... 5 |
| MATH | 207 | Matrix \& Vector Algebra with |  |
|  |  | Applications ..................... | .... 2 |
| MATH | 337 | Differential Equations I |  |
| SPCOM |  | Speaking \& Listening... | ..... 3 |
| General Education . |  |  | ..... 3 |

## Junior Year

## Courses

EN 321
EN 343
EN 365
EN 420
EN 439
EN 441
EN 443
Titles Credits
Thermodynamics I ..... 3
Engineering Economy ..... 3
Stochastic Systems Engineering ..... 4
Simulation Experiments ..... 4
Time and Motion Studies ..... 2Engineering of ManufacturingProcesses4
Quality Control and Reliability. ..... 3
EN 471 Operations Research ..... 3
General Education ..... 3
Technical Elective ..... 3
TOTAL 32
Senior Year

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| EN | 430 | Project Planning and Control .................. 3 |
| EN | 440 | Safety Engineering ........................ 3 |
| EN | 473 | Computer Integrated Manufacturing .... 3 |
| EN | 475 | Facility, Planning and Design ............... 3 |
| EN | 477 | Operations Planning and Control......... 3 |
| EN | 488 | Engineering Design Projects .............. 3 |
| EN | 493 | Senior Seminar.................................................................................................................................................................... |

TOTAL 29

## 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:

| Courses | 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 | $222 / \mathrm{L}$ | 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 ..................................................................... 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................... 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 I.......................... 3 |
| EN | 343 | Engineering Economy ......................... 3 |

TOTAL
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



## PLUS three of the following:

EN 420 Simulation Experiments ........................ 4

EN 439 Time and Motion Studies ...................... 2
EN 440 Safety Engineering ................................ 3
EN $441 \quad \begin{aligned} & \text { Engineering of Manufacturing } \\ & \\ & \\ & \text { Processes........................................... } 4\end{aligned}$
EN 443 Quality Control and Reliability................ 3
EN 471 Operations Research............................. 3
EN 473 Computer Integrated Manufacturing ..... 3
EN 475 Facility, Planning and Design ............... 3
EN 477 Operations Planning and Control.......... 3

## 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 semester 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 required to take the Fundamentals of Engineering (FE) exam administered by the Colorado State Board of Registration for Professional Engineers, on a regularly scheduled examination date. Students must take the exam to be eligible to graduate, although the results of the exam will not affect GPA or graduation.


## EXERCISE SCIENCE, HEALTH PROMOTION, AND RECREATION DEPARTMENT

## Department Chair: Roger Clark

Faculty: L. Clark, Conroy, Dallam, Foust, Martin, McClaran, Rochester, Smith, Stuyt

The mission of the Department of Exercise Science, Health Promotion, and Recreation is to prepare students for professional positions and leadership roles in Exercise Science, Health Promotion, and Recreation through experiential educational opportunities that promote wellness and healthy lifestyles. Graduates earn 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 six emphases of study:

- Athletic Training
- 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.

## Expected Student Outcomes

## General Requirements

All departmental Majors are required to:

- Complete an emphasis of study with a cumulative GPA of 2.50 or higher;
- 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.


## Exercise Science and Health Promotion graduates are expected to:

- Demonstrate knowledge and skills in the various scientific sub-disciplines and career paths within exercise science and health promotion;
- Exhibit the ability to read and interpret scientific journal articles in exercise science and health promotion with an understanding of the scientific methods, statistics, and design of the studies;
- Exhibit knowledge of the structure and function of the human organism both at rest and during movement;
- Exhibit the ability to participate and report on the scientific process;
- Display knowledge and skill related to first aid and the care/prevention of injuries occurring during physical activity;
- Demonstrate skills and knowledge germane to exercise assessment, prescription, programming and leadership;
- Exhibit knowledge in the basic principles of health with emphasis on the application of nutrition and personal fitness concepts in attaining personal wellness;
- Exhibit knowledge of the underlying kinesiological principles governing human movement;
- Exhibit knowledge of the fundamental principles of behavioral modification; and
- Apply knowledge and gain practical experience in a modern participatory management approach.

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").

The BS degree in EXHPR prepares program graduates for professional positions in worksite, clinical, school, fitness government and community settings.

- Graduates of the Athletic Training emphasis can sit for the Board of Certification (BOC) exam to become a certified Athletic Trainer. Athletic Trainers are employed in high school, university/college, clinical, corporate, professional sports, and military 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.

Three minors are currently available in Exercise Science and Health Promotion.

- The Exercise Science and Health Promotion minor is available to 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 also available to all students and is a great choice for students aspiring to coach.
- 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.


## Specific Requirements for the Exercise Science, Health Promotion Emphases:

- Athletic Training
- General Exercise Science
- Health Promotion/Wellness
- Physical Education K-12 Teacher Preparation


## Core Course Requirements for EXHP Emphasis Areas

| Cours |  | 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 |
| 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 (EXHP 443 replaces 461 for Athletic Training Emphasis) |

TOTAL 25

## Emphasis Area Course Requirements

## Athletic Training Education Program

http://ceeps.colostate-pueblo.edu/exhpr/athletic_training.htm
Students in the Athletic Training emphasis will be able to:

- Acquire knowledge, experience, and skills to assure successful completion of the Board of Certification (BOC) examination;
- Enter and succeed in the field of Athletic Training in any of the following settings: collegiate/university, clinical, high school, military, and/or industrial;
- Demonstrate skills for proper prevention, management, assessment, rehabilitation, and treatment of injuries and illnesses to athletes and the physically active;
- Engage in professional experience and skills in Athletic Training through practicums and field experiences; and
- Apply for acceptance into graduate athletic training education programs or other discipline areas of their choice.

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| Required EXHP |  | Core Courses |
|  |  | (EXHP 443 to replace 461)................ 25 |
| EXHP | 232 | First Aid ........................................... 3 |
| EXHP | 260 | Care and Prevention of Athletic |
|  |  | Injuries ............................................ 3 |
| EXHP | 279 | Practicum in Athletic Training I ............ 2 |
| EXHP | 323 | Functional Exercise Training ............... 2 |
| EXHP | 330 | Lower Extremity Evaluation ................ 3 |
| EXHP | 331 | Upper Extremity Evaluation ................ 3 |
| EXHP | 332 | Head, Neck and Spine Evaluation ........ 3 |
| EXHP | 339 | Clinical Pathology \& Assessment ......... 3 |
| EXHP | 379 | Practicum in Athletic Training II ........... 1 |
| EXHP | 389 | Practicum in Athletic Training III .......... 1 |
| EXHP | 419 | Athletic Training Field Experience ........ 8 |
| EXHP | 430 | Therapeutic Modalities....................... 3 |
| EXHP | 431 | Therapeutic Exercise ......................... 3 |
| EXHP | 436 | Exercise Assessment \& Leadership ..... 3 |
| EXHP | 479 | Practicum in Athletic Training IV .......... 1 |
| EXHP | 489 | Practicum in Athletic Training V ........... 1 |
| EXHP | 494 | NATA Test Preparation...................... 1 |
| BIOL | 223 | Physiology \& Anatomy I..................... 3 |
| BIOL | 223L | Physiology \& Anatomy I Lab............... 1 |
| BIOL | 224 | Physiology \& Anatomy II.................... 3 |
| BIOL | 224L | 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 |
| MATH | 121 | College Algebra ............................... 4 |

PSYCH 151 Intro to Human Development................ 3
SPCOM 103
Speaking and Listening
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 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 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 EXHP 279, 232, 260, and BIOL 223, 223L. (EXHP 232, 260 and 279 with a B or higher, all others with a C or higher grade);
- An overall grade point average of 2.6 or higher;
- A declared Exercise Science, Health Promotion, and Recreation major;
- Proof of current Red Cross First Aid and CPR for Professional Rescuer Certification;
- Letter of recommendation from a BOC-Certified Athletic Trainer;
- Complete interview with ATEP Director 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 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 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 can not 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 clinical portion of the athletic training education program occurs once a year during the fall semester only. Once accepted into the clinical portion of the program students must complete 4 semesters 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 2.6 or higher overall GPA;
- Maintain 3.0 GPA in all athletic training courses, including grades of no less than a B in EXHP 379, 389, 419, 479, and 489;
- Maintain athletic training student liability insurance; and
- Maintain Red Cross First Aid and CPR with AED for the Professional Rescuer certification.


## Outcome Assessment Activities for Athletic Training Emphasis

In addition to assessment, which is inherent in the core/emphasis requirements, prior to receiving clearance for graduation, each General Exercise Science major must complete:

- Departmental exit survey,
- Successful completion of all NATA educational competencies and proficiencies, and
- An exit comprehensive examination.


## General Exercise Science

Courses Titles Credits

Required EXHP Core Courses........................................ 25
EXHP 201 Drugs and Healthy Lifestyles................ 3
EXHP 232 First Aid ................................................ 2
EXHP 260 Care and Prevention of Injuries ............ 3
EXHP 436 Exercise Assessment \& Leadership ..... 3
EXHP 494 Field Experience.................................... 6
OR
EXHP 498 Internship........................................... 12
BIOL 223 Physiology \& Anatomy I........................ 3
BIOL 223L Physiology \& Anatomy I Lab................. 1
BIOL 224 Physiology \& Anatomy II........................ 3
BIOL 224L 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
MATH 121 College Algebra .................................... 4
PSYCH 151 Intro to Human Development................ 3
SPCOM 103 Speaking and Listening ........................ 3

## 13-19 credits from the following with a minimum of 410 upper division:

| REC | 102 | Mountain Orientation ......................... 2 |
| :---: | :---: | :---: |
| REC | 103 | Winter Orientation............................. 2 |
| REC | 104 | Desert Orientation ............................. 2 |
| REC | 105 | Canyon Orientation........................... 2 |
| 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 |
| EXHP | 113L | Whiteboard Boating ........................... 1 |
| EXHP | 115L | Skiing............................................. 1 |

REC 103 Winter Orientation.................................. 2
REC 104 Desert Orientation ................................. 2
REC 105 Canyon Orientation............................... 2
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
EXHP 115L Skiing.................................................... 1

| EXHP | 116L | Camping .......................................... 1 |
| :---: | :---: | :---: |
| EXHP | 117L | Backpacking .................................... 1 |
| EXHP | 118L | Jogging........................................... 1 |
| EXHP | 120L | Aerobics.......................................... 1 |
| EXHP | 175L | Racquetball...................................... 1 |
| EXHP | 176L | Life Guard Training ........................... 1 |
| PSYCH | 205 | Intro to Sports Psychology .................. 3 |
| EXHP | 233 | History and Principles of Physical <br> Education and Recreation $\qquad$ |
| EXHP | 243 | Methods of Rhythmic Activities ............ 2 |
| EXHP | 245 | Motor Learning and Development........ 3 |
| REC | 249 | Challenge Course Leadership ............. 2 |
| EXHP | 288 | Health Promotion Practicum ............... 3 |
| EXHP | 323 | Functional Exercise Training ............... 2 |
| EXHP | 345 |  <br> Games I $\qquad$ |
| EXHP | 346 |  <br> Games II $\qquad$ |
| EXHP | 348 | Methods of Individual and Dual Sports .. 3 |
| REC | 350 | Leadership and Ethics ....................... 3 |
| REC | 375 | Research and Evaluation of Recreation $\qquad$ |
| EXHP | 382 | Lifestyle Disease Risk Reduction......... 3 |
| EXHP | 411 | Commitment to Career Development ... 1 |
| EXHP | 432 | Applied Sport \& Exercise Psychology...3 |
| EXHP | 464 | Adapted Physical Education ............... 3 |
| EXHP | 470 | Methods of Coaching and Officiating .... 3 |
| EXHP | 485 | Methods in Health Promotion .............. 3 |
| EXHP | 494 | Field Experience .............................1-5 |
| EXHP | 498 | Internship...................................... 12 |

## Outcome Assessment Activities for General Exercise Science Emphasis

In addition to assessment, which is inherent in the core/emphasis requirements, prior to receiving clearance for graduation, each General Exercise Science major must complete:

- Comprehensive exit exam,
- Departmental exit survey, and
- Prepare a portfolio which includes:

1. A current copy of academic transcripts;
2. Cover letter and resume;
3. Career vision, mission, goal and/or philosophy statement;
4. Self-evaluation of proficiency including strengths and weaknesses;
5. At least 4 samples of classroom and practical work from EXHPR and other relevant courses such as: research papers, statistical analysis, course projects, literature reviews, etc.;
6. Evidence of participation in on- and/or offcampus interpersonal and leadership skill building co-curricular activities; and
7. Letters of recommendation from professionals on- and off-campus.

## Health Promotion/WelIness

http://ceeps.colostate-pueblo.edu/exhpr/health_promotion.htm
Student in the Health Promotion Wellness emphasis will be able to:

- Compare, contrast, and discern between health education/promotion theories;
- Summarize, review, and understand the roles, responsibilities, and certifications in the field of health promotion;
- Interpret the relationships among population growth, the environment, and human health and explain the concept of the spectrum of the health care delivery system;
- Develop and write an analysis of a chronic disease or social issue that includes application of theory, epidemiological principles, disease factors, change agent factors, and a case study;
- Explain and evaluate the seven responsibilities and competencies of entry-level health educators.
- Define, describe and apply professional ethics in the health promotion field;
- Write cohesive and meaningful learning objectives and develop and present health promotion lesson plans in at least 3 dimension areas;
- Develop a community action plan, evaluation plan, market plan, budget plan, and logic model based on assessment date for a population; and
- Complete a 400 hour internship applying critical thinking, problem solving, and skills learned through the curriculum of the program.

| Courses | Titles | Credits |
| :--- | :---: | :---: |
| Required EXHP | Core Courses....................................... 25 |  |
| EXHP | 201 | Drugs and Healthy Lifestyles ............. 3 |
| EXHP | 232 | First Aid ................................................... 2 |
| EXHP | 288 | Health Promotion Practicum ............. 3 |
| EXHP | 323 | Functional Exercise Training .............. 2 |
| EXHP | 336 | Community Health .......................... 3 |
| EXHP | 382 | Lifestyle Disease Risk Reduction ........ 3 |
| EXHP | 436 | Exercise Assessment \& Leadership .... 3 |


| EXHP | 485 | Methods in Health Promotion .............. 3 |
| :---: | :---: | :---: |
| EXHP | 487 | Health Promotion Program |
|  |  | Planning/Evaluation........................... 4 |
| EXHP | 498 | Internship....................................... 12 |
| BIOL | 223 | Physiology \& Anatomy I..................... 3 |
| BIOL | 223L | Physiology \& Anatomy I Lab............... 1 |
| BIOL | 224 | Physiology \& Anatomy II.................... 3 |
| BIOL | 224L | 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 |
| MATH | 121 | College Algebra ................................ 4 |
| MCCNM | 210 | Intro to Integrated Communication........ 3 OR |
| MKTG | 340 | Principles of Marketing ....................... 3 |
| PSYCH | 151 | Intro to Human Development............... 3 |
| SPCOM | 103 | Speaking and Listening ...................... 3 |
| Outcomes Promotion/W |  | t Activities for Health |
|  |  | ess Emphasis |

In addition to assessment, which is inherent in the core/emphasis requirements, prior to receiving clearance for graduation, each Health Promotion/Wellness major must complete:

- Comprehensive exit exam,
- Departmental exit survey,
- Prepare a portfolio which includes:

1. A current copy of academic transcripts;
2. Cover letter and resume;
3. Career vision, mission, goal and/or philosophy statement;
4. Self-evaluation of proficiency including strengths and weaknesses;
5. At least four samples of classroom and practical work from EXHPR and other relevant courses such as: research papers, statistical analysis, course projects, literature reviews, etc.;
6. Evidence of participation in on- and/or offcampus interpersonal and leadership skill building co-curricular activities; and
7. Letters of recommendation from professionals and on-and off-campus.

## Physical Education K-12 Teacher Preparation

http://ceeps.colostate-pueblo.edu/exhpr/k_12_physical_ed.htm
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/proginfo/goals.asp or http://www.doe.state.in.us/dps/standards/pdf/2005-10-24-PE.pdf
- 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.

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| Required EXHP |  | Core Courses | 25 |
| EXHP | 232 | First Aid |  |
| EXHP | 233 | History and Principles of Physica Education and Recreation | 2 |
| EXHP | 243 | Methods of Rhythmic Activities. |  |
| EXHP | 245 | Motor Learning and Developmen | ....... 3 |
| EXHP | 260 | Care \& Prevention of Athletic Injuries $\qquad$ | $\text { ..... } 3$ |
| EXHP | 345 | Methods of Physical Activities \& Games I. $\qquad$ | $\ldots . . .$ |
| EXHP | 346 | Methods Physical Activities \& Games II. | $2$ |
| EXHP | 348 | Methods of Individual and Dual Sports |  |
| EXHP | 351 | Methods of Teaching Elementary Physical Ed |  |
| EXHP | 465 | Adapted Physical Education. |  |
| EXHP | 478 | Methods of Teaching Secondary Physical Education |  |
| BIOL | 223 | Anatomy \& Physiology 1 |  |
| BIOL | 223L | Anatomy \& Physiology I Lab.. | ... 1 |
| MATH | 121 | College Algebra |  |
| PSYCH | 151 | Intro to Human Development |  |
| SPCOM | 103 | Speaking and Listening .......... | ... 3 |
| Two credits from the following: |  |  |  |
| EXHP | 105L | Snow Sports |  |
| EXHP | 113L | Whitewater Boating .. |  |
| EXHP | 114L | Basic Mountaineering Techniques | .... 1 |
| EXHP | 115L | Skiing |  |
| EXHP | 116L | Camping |  |
| EXHP | 117L | Backpacking | ... 1 |
| REC | 102 | Mountain Orientation | ... 2 |
| REC | 103 | Winter Orientation. | ... 2 |
| REC | 104 | Desert Orientation | .. 2 |
| REC | 105 | Canyon Orientation. | . 2 |
| REC | 249 | Challenge Course Leadership .. | ..... 2 |

Two credits from the following:
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 174L Tennis...................................................... 1
EXHP 175L Racquetball ............................................. 1
EXHP 473 Coaching Certification Clinic.................... 1
One Credit from the following:
EXHP 146L Beginning Swimming .................................. 1
EXHP 176L Life Guard Training .................................. 1
EXHP 276L Water Safety Instructor Certification ....... 2
For teaching endorsement requirements, see the Teacher Education Program section of this catalog.

Outcome Assessment Activities for Physical Education K-12 Teacher Preparation Emphasis

In addition to assessment, which is inherent in the core/emphasis requirements, prior to receiving clearance for graduation, each K-12 Teacher Preparation major must complete:

- Departmental exit survey,
- Proficiency in all Colorado and CSU-Pueblo Teacher Education Standards,
- A high quality electronic teacher work sample,
- A high quality student teaching portfolio, and
- A passing grade on the Physical Education P.L.A.C.E. Certification Exam.


## Exercise Science and Health Promotion Minors

## Expected Student Outcomes

Exercise Science and Health Promotion 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 " $C$ " in all minor courses; and
- Repeat minor courses with a grade of "D" or lower until a grade of "C" or higher is achieved.

Specific Requirements for Exercise Science and
Health Promotion Minors:

## Coaching

| Courses | Titles | Credits |
| :--- | ---: | :--- | ---: |
| BIOL | 112 | Nutrition................................................ 3 |
| EXHP | 260 | Care and Prevention of Athletic Injuries... 3 |
| EXHP | 432 | Applied Sport \& Exercise Psychology .... 3 |
| EXHP | 470 | Methods of Coaching \& Officiating ........ 3 |
| EXHP |  | Methods of coaching courses............... 5 <br>  <br>  <br> EXd/or |
| PSYCH | 494 | Field Experience ...................... (1-5 VAR) |
| PSYCH | 205 | Introduction to Sports Psychology ......... 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 | 162/L | Personal Health Lab | 1 |
| Two credits from the following list................................. 2 |  |  |  |
| REC | 102 | Mountain Orientation |  |
| REC | 103 | Winter Orientation. |  |
| REC | 104 | Desert Orientation . |  |
| EXHP | 106L | Martial Arts and Self-De |  |
| EXHP | 108L | Yoga. |  |
| EXHP | 109L | Volleyball |  |
| EXHP | 110L | Weight Training |  |
| EXHP | 113L | Whiteboard Boating |  |
| EXHP | 115L | Skiing. |  |
| EXHP | 116L | Camping . |  |
| EXHP | 117L | Backpacking. |  |
| EXHP | 119L | Walking for Fitness . |  |
| EXHP | 120L | Aerobics |  |
| EXHP | 174L | Tennis. |  |
| EXHP | 175L | Racquetball. |  |
| EXHP | 176L | Life Guard Training. |  |
| EXHP | 300 or | igher level student electiv |  |

TOTAL 20

## Fitness and Recreational Sports Management



| MKTG | 349 | Marketing Service Businesses .............. 3 |
| :--- | ---: | :--- |
| REC | 240 | Recreation Program Design ................... 3 <br> REC |
| 485 | Recreation Facility Design/ <br> Management ........................................ 3 |  |
| Choose one of the following: ................................. 3 |  |  |

TOTAL 21

## 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.

- A minor in Recreation is available to all students. 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.


## Recreation graduates are expected to:

- Explore and analyze proven leadership practices and strategies in organizations and relate the theoretical and practical material to leisure and sport organizations;
- Learn experiential and self-explorative techniques of problem solving;
- Assess past and present leadership experiences and identify possible future leadership opportunities in the recreation profession;
- Demonstrate the use of career planning materials;
- Recognize opportunities and threats within our disciplines, including issues and problems facing recreation professionals;
- Understand the process of professionalization currently underway in leisure services, as well as the professional organizations that are involved;
- Demonstrate the ability to identify and analyze trends, issues and contemporary problems in leisure, recreation, and parks;
- Be able to address an audience, to facilitate a discussion, and to communicate effectively within a group;
- Develop a professional résumé acceptable for use in a competitive job search; and
- Demonstrate effective interviewing skills.


## Specific Requirements for the Recreation Emphases:

Core Course Requirements for the Recreation
Emphases


TOTAL 34

## Emphasis Course Requirements

## Outdoor Leadership

http://ceeps.colostate-pueblo.edu/exhpr/outdoor_adventure _education.htm
Courses Titles ..... Credits
Required Recreation Core Courses ..... 34
REC 100L Wilderness Technical Skills .....  1
EXHP 113L-117L Outdoor Skills (select 4 of 5)4

| REC | $102-$ |  |
| :--- | :--- | :--- |
|  | 105 | Orientations (select 3 of 4) ..................... 6 |
| 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 \& Management..... 3 |

## Community/Commercial Recreation

http://ceeps.colostate-pueblo.edu/exhpr/community_ commercial_rec.htm

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| Required | Recreation Core Courses ............................... 34 |  |

## Outcomes Assessment Activities

In addition to assessment, which is inherent in the core/allied/methods coursework requirements, prior to receiving clearance for graduation, each Recreation major must complete:

- A departmental exit survey,
- A comprehensive exit examination, and
- A portfolio that includes:

1. A current copy of academic transcripts and resume;
2. Samples of research/term papers, projects, etc., from Recreation and other relevant courses;
3. Evidence of participation in on- and/or offcampus interpersonal and leadership skill building co-curricular activities; and
4. Letters of recommendation from professionals' on-and-off campus.

## Expected Student Outcomes

Recreation 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; and
- Repeat minor courses with a grade of "D" or lower until a grade of " $C$ " or higher is achieved;


## Recreation Minor: Specific Requirements

$\left.\begin{array}{lll}\text { Courses } & \text { Titles } & \text { Credits } \\ \text { EXHP 101 } & \text { Introduction to EXHPR ......................... } 2\end{array}\right\}$

## NURSING DEPARTMENT

Associate Dean: Dr. Mary Kontz<br>Undergraduate Coordinator: DePalma<br>Faculty: Brumfield, Cerankowski, Crownover, Deniro, Franta, Galloway, McClure, Nichols, Waggener, Whetzel, Williams

## Department Mission

The mission of the Department of Nursing is to prepare graduates for professional positions as competent and caring nurses.

The department is committed to offering academic programs that meet diverse regional nursing needs.

The department is committed to excellence in teaching and evidence based nursing practice. Emphasis is placed on effective student learning, academic achievement and safe, competent nursing performance.

## 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), 61 Broadway, New York, NY 10006.

## 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 Baccalaureate of Science in Nursing degree (BSN). The Basic BSN is an option developed for the student who has completed prerequisite courses and has no degree, certificate or license. The RNBSN 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. Undergraduate nursing students may elect to take nursing graduate courses during their senior year.

## Undergraduate Program Goals

The program will:

- Facilitate learning that provides entry level baccalaureate knowledge and supports competence for nursing practice.
- Incorporate human needs theory to provide culturally competent care for clients in diverse healthcare settings.
- Support the development of assessment, communication, critical thinking, use of evidence based practice, and technological skills in nursing practice.
- Prepare graduates to exhibit standards of practice and professional performance in the baccalaureate roles of provider, teacher, manager, and client advocate in the changing health care environment.
- Provide baccalaureate education that facilitates progression of associate degree nurses to baccalaureate prepared nurses.
- Support the learning needs of a diverse student population by creating a caring learning environment in which all are respected, nurtured and celebrated.


## Expected Undergraduate Student Outcomes

The Bachelor of Science in Nursing Major is designed to prepare the graduate to:

- Demonstrate baccalaureate level knowledge and competence in providing nursing care to diverse individuals, families, groups, and communities using a human needs framework.
- Provide culturally competent care for clients in diverse healthcare settings.
- Demonstrate proficiency in assessment, communication, critical thinking, use of evidence based practice, and technological skills for entry level employment.
- Deliver care guided by standards of practice for professional performance in the roles of provider, teacher manager and client advocate.
- Demonstrate behaviors that reflect professional ethics and accountability.
- Demonstrate caring through commitment, compassion, conscience, competence, confidence and comportment in professional nursing practice.


## 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 Freshman

Slots for admission as a freshman are limited. Admission is not guaranteed as students with the highest GPA's 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 GPA of 3.25 or higher on a 4.0 scale.
- 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.

## 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. Consideration is given to the percentage of prerequisites and general education courses completed by the admission deadline. 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 taking NSG 232/232L.
- All general education must be completed prior to taking NSG 232/232L.
- 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) semester 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 clinical coursework in the nursing program they must attend a mandatory orientation and have the following completed prior to the orientation.

- Return receipt for program acceptance by stated deadline.
- Have fingerprint background check by the Pueblo County Sheriff's Office located at CSU-Pueblo during nursing orientation, Colorado Law. House bill 971084).
- Have a urine drug screen no more than 30 days prior to nursing orientation date.
- Have current certification in CPR (Health Care Provider-C or equivalent).
- Have a current physical examination within the last year and current immunization records. This must include the Hepatitis B series, Measles, Mumps and Rubella and a 2 step TB test.
- Submit current unofficial transcripts showing completion of all prerequisite and general education classes.


## 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 and Intro to Human Development 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 student's undergraduate program coordinator and Associate Dean. Degree plans are developed with the student and their advisor or undergraduate program coordinator.

## 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. Anything less than a C in required courses will not be applied toward graduation. 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.


## TOTAL 46

| NSG 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 | 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 |

## 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.

## Summer - Junior <br> NSG 372 Clinical Practicum I............................... 3 <br> Spring - Senior <br> NSG 472 Clinical Practicum II............................... 3

## Basic BSN Option Program Plan

## Freshman - Fall

| Courses | Titles | Credits |
| :--- | :--- | ---: |
| ENG 101 | Composition I............................................ 4 |  |
| BIOL 223/L | Physiology \& Anatomy I/Lab............ 4 |  |
| PSYCH 151 | Introduction to Human Development .... 3 |  |
| SPCOM 103 | Speaking and Listening ..................... 3 |  |
| Foreign Language.............................................. 3 |  |  |

TOTAL 16
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 | $111 / \mathrm{L}$ | Principles of Chemistry/Lab................. 4 |
| NSG | 207 | Nursing Pathophysiology................... 3 |
| History |  | Per Gen. Ed. Requirement ............... 3 |


| Junior - Fall |  |  |
| :--- | :--- | :--- |
| Courses | Titles |  |
| 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 | $332 / \mathrm{L}$ | Caring for Children/Families/Lab .......... 6 |
| NSG | 351 | Evidence Based Nursing Research ..... 3 |


| Senior - Fall <br> (Graduation Planning Due) |  |  |  |
| :---: | :---: | :---: | :---: |
| Cour |  | Titles | Credits |
| NSG | 420/L | Caring | ...... 8 |
| NSG | 442/L | Global | ...... 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.

## 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



## Junior - Fall

| Courses |  | Titles |
| :--- | :--- | :--- |
| NSG | 308 | Charmacology in Nursing Practice....... 3 |
| NSG | $312 / \mathrm{L}$ | 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 | $322 / \mathrm{L}$ | Caring for Adults I/Lab........................ 8 |
| NSG | $312 / \mathrm{L}$ | Caring for Childbearing Family/Lab |
| NSG |  | OR |

## Senior - Spring

| Courses | Titles | Credits |
| :--- | :--- | :--- | :--- |
| NSG | 451 | Nursing Leadership \& Issues ............... 3 |
| NSG | $452 / \mathrm{L}$ | 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 RN-BSN student applications are taken year round. The student will have a/an:

- Associate Degree or Diploma in Nursing.
- Colorado nursing license in good standing.
- Minimum cumulative GPA of 3.00 in nursing prerequisite and general education courses.
- All science courses must be completed by the junior year.
- All other general education and nursing prerequisite courses must be completed by the senior year.


## Program of Study <br> (one day per week and/or hybrid)

The student must meet with the RN-BSN advisor to develop a program of study. The program of study is individualized to meet the student's needs. The program of study may include an accelerated, full-time or part-time sequence. The program of study is designed to assist the working RN in returning to school to complete their BSN. The student may choose from several program plans to meet their busy schedules. The courses are offered one day per week and/or hybrid. The RN-BSN option will include 33 credit hours of transfer/escrow credits through the articulation agreement, 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 only transfer in 27 prerequisite credits along with 33 RN credits for a total of 60 credit hours.

Nursing Transfer/Escrow................................................. 33
Prerequisite Courses (excluding NSG 207) 43
General Education and Prerequisites Courses(Excluding NSG 207)
Courses Titles Credits
ENG 101
ENG 102
SPCOM 103
BIOL 206/L Introduction to Microbiology/Lab......... 4
BIOL 223/L Physiology \& Anatomy I/Lab ..... 4
BIOL 224/L Physiology \& Anatomy II/Lab ..... 4
CHEM 111/L Principles of Chemistry/Lab ..... 4
MATH 156 Introduction to Statistics ..... 3
PSYCH 151 Intro to 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 ..... 43

## RN-BSN Courses

## Traditional Courses

Courses Titles Credits
NSG 302/L Health Promotion \& Assessment/Lab ... 3
NSG 307 Health and Disease Systems. ..... 3
NSG 331 Healthy Aging ..... 2
NSG 442/L Public Health Nursing/Lab ..... 6
NSG 452/L Comprehensive Nursing Practice/Lab ..... 9
Approved upper division elective. ..... 1
Approved electives (lower or upper division) ..... 4
Hybrid Courses
Courses Titles CreditsNSG 309
NSG 311Professional Nursing Practice. 4
NSG 351 Evidence Based Nursing Practice ..... 3NSG 451
Nursing Leadership and Issues ..... 3
NSG 371 Healthcare Informatics ..... 2
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

## 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 |
| :--- | :--- | :--- |
| NSG | $302 / \mathrm{L}$ | Credits <br> Health Promotion \& Assessment/Lab ... 3 |
| NSG | 331 | Healthy Aging ...................................... 2 |

## Fall - Senior

Courses Titles Credits
NSG 442/L Global Public Health/Lab ....................... 6
Approved upper division elective......................................... 1
TOTAL 7

## Spring - Senior

| Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| NSG | 451 | Nursing Leadership \& Issues............... 3 |
| NSG | $452 / \mathrm{L}$ | Comprehensive Nursing Practice/Lab .. 9 |

TOTAL 12

## The Accelerated Option for Registered Nurse to Bachelor of Science in Nursing Option (RN-BSN)

The RN-to-BSN Accelerated Option enables registered nurses to make the transition to professional nursing with a baccalaureate degree in three consecutive semesters. The associate degree nurse can complete their bachelor's degree nursing courses in three semesters. Prerequisite and general education courses must be completed prior to admission to this option. Courses are delivered in a hybrid fashion allowing the student to take part of the course through the web, and part of the course through on-site instruction. Clinical components of this option allow the student to essentially complete their clinical experiences in their hometown. Students must meet with the RN-BSN advisor to form a plan of study.

## 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 GPA of 3.0 and follow all admission requirements set forth in the Basic Nursing Option. A minimum of 30 credit hours must be taken at CSU-Pueblo or more based on the students plan. Due to the intensity of the curriculum, it is advised that the student not work and be able to attend to their studies fulltime. Students must maintain a cumulative nursing 3.00 GPA to progress.

Prerequisite Courses Credits
BIOL 206/L Introduction to Microbiology/Lab........... 4
BIOL 223/L Physiology \& Anatomy I/Lab................. 4
BIOL 224/L 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 Intro to Human Development................ 3
Foreign Language ............................................................ 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 <br> 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 <br> 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

## Paramedic to Bachelor in Nursing 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. A minimum of 30 credit hours must be taken at CSU-Pueblo or more based on the students plan. Due to the intensity of the curriculum, it is advised that the student not work and be able to attend to their studies fulltime.

## 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 | Physiology \& Anatomy I/Lab............... 4 |
| BIOL 224/L | 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 | Intro to Human Development.............. 3 |
| History | Per Gen. Ed. Requirement ................. 3 |
| Foreign Language ....................................................... 3 |  |
| Humanities Social Science | Per Gen. Ed. Requirement ................. 3 |
|  | Per Gen. Ed. Requirement ................. 3 |
|  | TOTAL 46 |

## Program Plan

| Summer |  |  |
| :--- | :--- | :--- |
| Courses |  | Titles |
| NSG | 231 | Credits |
| 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 |

## Fall

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| NSG | $312 / \mathrm{L}$ | Caring for Childbearing Family/Lab ...... 6 |
| NSG | $322 / \mathrm{L}$ | Caring for Adults I/Lab........................ 8 |
| NSG | $332 / \mathrm{L}$ | 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

## Masters of Science Courses Taken By Seniors

Undergraduate nursing students may elect to take nursing graduate courses during their senior year. The policies are outlined in the Graduate Program section of this catalog.

## TEACHER EDUCATION PROGRAM

Associate Dean: Dr. Victoria Marquesen<br>Faculty: Massey, Peters, Pettit, Piazza, Piquette, Ramirez, Ryan

## 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.


## 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.

## Teacher Education Goals

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.

## 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
- Linguistically Diverse
(Requires an initial teaching license. Contact Teacher Education for information.)
- Mathematics (7-12)
- Music (K-12)
- Physical Education (K-12)
- $\quad$ Science (7-12)
- Social Studies (7-12)


## 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. Complete Health Clearance Form.
2. Cumulative grade point of 2.600 or greater.
3. Completion of ENG 101 and 102 with grades of $C$ or better.
4. 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.
5. 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.
6. Completion of ED 301 with a grade of $C$ or better.
7. Completion of a formal, standardized test such as the Measure of Academic Proficiency and Progress (MAPP) and a writing sample.
8. 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.
9. 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. 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. Completion of all required early field experience hours. Hours must include work at the appropriate levels in diverse high need settings.

Applications must be submitted a semester in advance: First Friday in October for a spring semester assignment; first Friday in March for a fall semester assignment.

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.

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| ED | 202 | Foundations of Education........................... 3 |
|  |  | PREREQUISITES- None |
| ED | 280 | Educational Media and Technology ............. 3 |
|  |  | PREREQUISITES- None |
| ED | 301 | Frameworks of Teaching ........................... 3 |
|  |  | (Admission to Education is completed in this course) |
|  |  | PREREQUISITES- Completion of 45 college hours and a cumulative GPA of 2.6 |
| ED | 380 | Integrated Methods in Elem. School ............ 3 |
|  |  | PREREQUISITES- Admission to Education; |
|  |  | GPA of 2.6 |
| RDG 410 |  | Teaching Rdg and Language Arts ............... 4 |
|  |  | PREREQUISITES- Admission to Education; |
|  |  | GPA of 2.6 |
| ED | 412 | Teaching Diverse Learners ......................... 3 |
|  |  | PREREQUISITES- Admission to Education; |
| ED | 413 | Teaching Social Studies ............................ 3 |
|  |  | PREREQUISITES-Admission to Education; GPA of 2.6 |
| ED | 414 | Teaching Elementary Science \& Health ........ 2 |
|  |  | PREREQUISITES-Admission to Education; |
| ED | 417 | Teaching Mathematics in Elementary |
|  |  | School ................................................... 2 |
|  |  | PREREQUISITES- Admission to Education: |
|  |  | GPA of 2.6; Completion of Liberal Studies |
|  |  | Math Block. |

```
ED 485 Capstone Seminar in Education
```

$\qquad$

```
    PREREQUISITES-Admission to Student
    Teaching. Must be taken with student
    teaching
ED 487 Student Teaching Elementary
```

$\qquad$

```
        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:
$\left.\begin{array}{lll}\text { Courses } & \text { Titles } \\ \text { PSYCH } 151 & \text { Credits } \\ \text { Introduction to Human Development......... } 3\end{array}\right\}$

| ED 488/489 | Secondary Student Teaching/ |
| :--- | :--- |
|  | Student Teaching K-12 ......................... 12 |
|  | PREREQUISITES-Admission to |
|  | Student Teaching |

TOTAL 40-42
*Physical Education students complete EXHP 465, Adaptive Physical Education.

## 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.


## 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.


## 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 22 hours, 14 from core courses and 8 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 |  |
|  | 412 | Adolescents ........................................... 2 |
| RDG 310 | Current Approaches to Reading and |  |
|  |  | Writing Instruction ...................................... 3 |
| RDG 410 | Teaching Rdg and Language Arts ............ 4 |  |
| RDG 435 | Content Area Literacy .......................... 4 |  |
| RDG 450 | Diagnosis and Remediation of |  |
|  |  | Reading Problems ..................................... 3 |

CORE TOTAL 16
Six credits of electives from the following list:

| Courses |  | Titles C | Credits |
| :---: | :---: | :---: | :---: |
| RDG | 360 | Practicum.............................. |  |
| RDG | 431 | Developing Creative Centers ...... |  |
| RDG | 436 | New Directions in Reading Comprehension |  |
| RDG | 437 | Newspapers as a Teaching Resource $\qquad$ |  |
| RDG | 442 | Reading Across Cultures ............ |  |
| RDG | 491 | Topics in Reading ..................... |  |
| ED | 412 | Teaching Diverse Learners......... |  |
|  |  | Core Total Electives Required | 16 6 |
|  |  | Total Required | 22 |

## 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. On the next page is information on students who completed CSU-Pueblo's teacher education program during 2007-2008

## Required Program/Supplementary Material


S.9. Is your teacher preparation program currently under a designation as "low-performing" by the state)?
Yes $\quad \underline{\text { X No }}$

## Colorado State University-Pueblo

Academic Year: 2007-2008 Testing Period: 9/07-8/08 Number of Program Completers: $114^{*}$

PLACE Test Results

| Test Field/Category | Institution |  | Statewide |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number Tested | Number Passed | Pass Rate* | Pass Rate |
| Academic Content Areas |  |  |  |  |
| 028 Art | 6 | -- | -- | 100\% |
| 001 Elementary Education | 15 | 12 | 80\%* | 98\% |
| 007 English | 2 | -- | -- | 96\% |
| 004 Mathematics | 2 | -- | -- | 100\% |
| 029 Music | 4 | -- | -- | 100\% |
| 032 Physical Education | 10 | 10 | 100\% | 100\% |
| 006 Social Studies | 3 | -- | -- | 90\% |
|  |  |  |  |  |
| PLACE Aggregate | 42 | 37 | 88\%* | 98\% |
|  |  |  |  |  |
| Summary Totals and Pass Rate | 114 | 114 | 100\% | 98\% |

Note: Pass rates for content areas with fewer than 10 students taking the test are not included per the "Rule of 10 " described in the Reference and Reporting Guide, page II.
*All CSU-Pueblo students passed their licensure exams prior to student teaching. The students not listed in the table took the PRAXIS and passed that exam.

## COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

## Dr. Roy Sonnema, Dean

| Academic Departments/Programs |  | Mass Communication and Center for New Media |  |
| :---: | :---: | :---: | :---: |
| Art |  | Major: | Mass Communications (BA, BS) |
|  |  |  | Emphasis Areas: |
| Major: | Art (BA, BFA) |  | Electronic Media |
|  | Emphasis Area: |  | Integrated Communication |
|  | Art Education K-12 (BA) |  | Journalism |
| Minor: | Art | Minor: | Mass Communications |
| Chicano/a Studies Program |  | Military Science ROTC Program |  |
| Minor: | Chicano Studies | Minor: | Military Science |
| English/Foreign Languages |  | Music |  |
| Majors: | English (BA) <br> Emphasis Areas: Creative Writing Secondary Teaching Endorsement Foreign Language-Spanish (BA) | Major: | Music (BA) <br> Emphasis Areas: Music Education K-12 Music Performance |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  | Minor: | Music |
| Minors: | Creative Writing |  |  |
|  | English | Non-Profit Administration |  |
|  | French |  |  |
|  | Italian | Minor: | Non-Profit Administration |
|  | Professional Writing |  |  |
|  | Spanish | Psychology |  |
| History | /Political Science/Philosophy/Geography | Major: | Psychology (BA, BS) |
| Majors: | History (BA, BS) | Minor: | Psychology |
|  | Emphasis Area: |  |  |
|  | History Secondary Education (BS) | Social Work |  |
|  | History (M.A.) |  |  |  |
|  | (See Graduate Programs section of catalog) | Major: | Social Work (BSW) |
|  | Emphasis Areas: |  |  |
|  | General History | Sociology/Anthropology/Social Science |  |
|  | Public History |  |  |  |
|  | Teaching | Majors: | Sociology (BA, BS) |
|  | Political Science (BA, BS) |  | Emphasis Area: Criminology |
|  | Emphasis Areas: |  |  |
|  | American Political Institutions and |  | Social Science (BA, BS) (Offered through Continuing Education only) |
|  | Politics |  |  |
|  | Global Studies |  |  |
|  | Public Administration and Public Policy | Minors: | Anthropology |
|  | Secondary Education |  | Sociology |
| Minors: | History | Education only) |  |
|  |  |  |  |  |
|  | Political Science |  |  |  |
|  |  | Women's Studies |  |
| Liberal Studies Program |  | Minor: Women's Studies |  |
| Major: | Liberal Studies (BS) |  |  |

## 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 other graduation requirements listed in the catalog, students in the College of Humanities and Social Sciences must complete 18 hours of coursework not counted toward the major field of study or general education.

## ART DEPARTMENT

## Interim Department Chair: Victoria Hansen

Faculty: Aviña, Dalton, 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.

## Department Goals

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.

## Expected Student Outcomes

## General 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 Credits
ART 110 Art Career Orientation ........................... 1
(Fall Semester)
ART 115 Two-Dimensional Design...................... 3
ART 116 Three-Dimensional Design ................... 3
ART 141 Drawing I................................................ 3
ART 211 History of Art I (fall)............................... 3
ART 212 History of Art II (spring).......................... 3
ART 242 Drawing II ............................................. 3
TOTAL 19

## Specific Requirements for the BA Degree Art Major

| ART Courses | Titles | Credits |
| :--- | :--- | :--- |
| Required Art Core .......................................................... 19 |  |  |


| ART | 310 | Portfolio Review................................ 1 |
| :---: | :---: | :---: |
|  | 411 | Twentieth-Century Art........................ 3 |
|  | 410 | Senior Career Orientation..................... 1 (last spring semester) |
|  |  | TOTAL 33 |
| PLUS |  |  |
| Emphasis area $\qquad$ 12 <br> ART Electives (selected with an art advisor) $\qquad$ |  |  |
|  |  |  |
| L 50 |  |  |
| Specific Requirements for BA Degree Art Education K-12 Emphasis |  |  |
| ART Courses Titles Credits |  |  |
| Required Art Core $\qquad$ 19 |  |  |
|  | 234 | Painting I.......................................... 3 |
| ART | 247 | Ceramics I ....................................... 3 |
| ART | 250 | Fibers \& Jewelry for Educators ............ 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 |
|  |  | Senior Career Orientation...................... 1 <br> (last spring semester before student teaching) |
| Art Upper Division Electives (selected with an art advisor) $\qquad$ .8-11 |  |  |
|  |  | TOTAL 50-53 |
| 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 |  |  |
| ART | 117 | Digital Media Basics .......................... 3 |
| Studio Explorations .................................................. 9 |  |  |
| (Select 3 courses for a total of 9 semester hours |  |  |
| 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 |
| Professional Development |  |  |
| ART | 310 | Portfolio Review................................ 1 |
| ART | 410 | Senior Career Orientation $\qquad$ (last spring semester) |

ART 310
Twentieth-Century Art. ..... 3
ART Senior Career Orientation ..... 1
TOTAL ..... 3Cmu
ART Electives (selected with an art advisor) ..... 5
TOTAL 50
Specific Requirements for BA Degree Art EducationART Courses TitlesCredits
Required Ant Core .....
ART 247 Ceramics I ..... 3
3
ART 276 Photography3
ART XXX Upper Division Art History Course ..... 3
310 Portfolio Review ..... 1
(last spring semester before studentteaching)art advisor)8-11Teacher Education Program for details.
Specific Requirements for the BFA Degree ArtART Courses TitlesCredits
Required Art Core ..... 19Studio Explorations9from the following list:)
ART 233 Sculpture 1 .....
ART 247 Ceramics .....  3
ART 270Digital Art I 3
ART 276 Photography3
Development
ART 410 Senior Career Orientation ..... 1
(last spring semester)

## Art History

ART 411 Twentieth-Century Art. ..... 3
ART XXX Upper Division Art History ..... 3
PLUS
ART Upper Division Electives ..... 12
ART Upper Division Studio Emphasis Area ..... 15
TOTAL 66
Specific Requirements for the Art Minor
ART Courses Titles Credits
ART 115 or 116 Two or Three-Dimensional Design ..... 3
ART 141 or 242 Drawing I or II ..... 3
ART 211 or 212 History of Art I or II ..... 3
Art electives approved by minor advisor ..... 12
TOTAL

## 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.

## Outcomes Assessment Activities

- Art majors will successfully demonstrate competencies required by the department. Competencies will be evaluated through a portfolio review.
- Each art major is required to produce and maintain a portfolio of work done at CSU-Pueblo as a record of achievement. The contents and objectives of the portfolio will be described, discussed and planned in the career orientation class (ART 110). ART 310 is the mid degree portfolio review taken after completing the art core. Final evaluation of the progressive portfolio will take place during the student's last semester as part of the senior orientation class (ART 410).
- The format of the portfolio may vary according to subject matter and content but in general the presentation materials will consist of 35 mm color slides, prints, graphic design samples, electronic files, and/or videotapes, as appropriate.
- As a competency indicator of achievements in the area of art history, part of the portfolio should contain samples of a student's written material as related to art history, analysis and criticism.
- The intent of the portfolio is to faithfully reflect the ability and competency level of the art student as he or she progresses in the program. The makeup of the
portfolio will reflect the personal accomplishments of each individual.
- A complete set of course outlines and examination examples for each course will be maintained and updated by faculty members and made available to the student upon request. Class objectives and skills attained during the class will be denoted clearly in these materials.


## 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.


## Expected Student Outcomes

## General Requirements

- Students in Chicano/a studies courses will display an adequate and measurable knowledge of the subject matter within the course.
- Students in Chicano/a studies courses will develop an understanding of the relationships of ethnic groups within American society by viewing the academic study of Chicanos/as as a paradigm for the study of other ethnic groups.
- 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.

| CS Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| CS | 101 | Introduction to Chicano Studies | ..... 3 |
| CS | 136 | The Southwest United States . |  |
| CS | 246 | History of Mexico. |  |
| CS | 306 | La Chicana. |  |
| CS | 493 | Seminar. |  |
| Electives |  |  |  |

TOTAL 24

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 CreditsCS/ENG 220CS/SW 230CS/WS 240
CS 291 Special Topics ..... 1-3
CS ..... 303
CS/SW 325 ..... 3
CS 420 Voices of Protest ..... 3
CS/WS 401 Third World Feminism ..... 3
CS/HIST 489 Borderlands .....  3
CS 491 Special Topics ..... 1-3
CS 495 Independent Study ..... 1-3
498 Internship CS ..... 1-3

## Outcomes Assessment Activities

- Upon identification of a Chicano/a studies minor, the Chicano/a studies coordinator will initiate a "Chicano/a studies program" file on the student, with the student's permission. The file will contain the program of design, the student's orientation (research interest, general interest, personal interest, employment interest, etc.), a history of the student's academic progress, the substantive research paper completed in CS 493, a record of meetings with the coordinator, and other examples of the student's academic performance.
- At three- seven- and 10-year intervals, the graduate will be contacted and asked to evaluate the program's influence.
- In addition to course syllabi, the Chicano/a studies coordinator will retain a copy of examinations administered in Chicano/a studies courses for a 10-
year period. At five-year intervals, the coordinator and the faculty will determine if consistency and academic integrity are being maintained by reviewing instruments of cognitive measurement, student perception forms and trends, alumni comments, and comparative analysis of grade distribution patterns.


## ENGLISH/FOREIGN LANGUAGES DEPARTMENT

Department Chair: Katherine Frank
Faculty: Cobián, Eskew, Griffin, Montgomery-Ratcliff, Morales, Picicci, Ribadeneira, RodríguezArenas, Souder, C. Taylor, T. Taylor

## ENGLISH PROGRAM

The major in English leads to a degree of Bachelor of Arts (BA) 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. Critical, analytic, and composing skills, which provide excellent preparation for professional careers such as teaching, editing and publishing, business, media, public service, and the arts are emphasized.

## Program Goals

Students will meet minimum professional standards by demonstrating knowledge of

- Significant traditions as well as historical and cultural contexts of literature,
- Methods of academic research, applying that knowledge to their own writing, and
- A variety of critical theories.

Students will meet minimum professional standards by demonstrating the ability

- To analyze and synthesize ideas with clarity and accuracy,
- To use a range of English syntactic structures effectively, and
- To construct an original and convincing argument using a range of rhetorical techniques.


## Expected Student Outcomes

The English faculty believes that grades are valid indicators of a student's progress and performance; therefore, students must complete, with a grade of C or better, all courses counting toward the major or minors.

## 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 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.

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 the English Program Assessment Committee, consisting of the chair of English and 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 toward completing major requirements and meeting the Program Goals listed in the catalog. Advisors report any problems or deficiencies in the program encountered by their students to the Program Assessment Committee through the department chair.
- 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 Program Assessment Committee for review. In order to pass English 493, students must demonstrate satisfactory levels of achievement in meeting the program goals.
- The Program Assessment Committee reviews or has reviewed the papers from English 493 on an annual basis and prepares an analysis of what they reveal about the program's success.
- The Program Assessment Committee reviews field placement supervisor reports.
- The Program Assessment Committee administers a student-satisfaction questionnaire to all senior English majors each year. Similar questionnaires are sent to recent graduates and representative employers on a periodic basis.
- The Program Assessment Committee monitors the English curricula at leading comparable institutions and apprises 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
(To be taken at or near the end of the program)

One of the following courses in Genres:3

| ENG | 307 | Poetry |
| :--- | :--- | :--- |
| ENG | 308 | Fiction |
| ENG | 309 | Drama |

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.

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 Writing, beyond ENG 101 and 102

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 12 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

## 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 <br> ENG <br> 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 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 |

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 $\qquad$ .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) $\qquad$

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 |

One of the following courses .3
$\begin{array}{lll}\text { ENG } & 325 & \text { Nature Writing in the West } \\ \text { ENG } & 414 & \text { Advanced Writing Workshop }\end{array}$
TOTAL 45

## Specific Requirements for the Bachelor of Arts in English with Secondary Teaching Endorsement

A total of 41 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:
\(\left.$$
\begin{array}{l}\text { ENG Courses } \\
\text { ENG } 201 \quad \begin{array}{l}\text { Titles } \\
\text { Introduction to Literary Study ................ } 3 \\
\text { (To be taken at or near the start of } \\
\text { the program) }\end{array} \\
\text { ENG } 493 \quad \begin{array}{l}\text { Senior Seminar.................................. } 3 \\
\text { (To be taken at or near the end of } \\
\text { the program) }\end{array}
$$ <br>

One of the following courses in Genres: ......................... 3\end{array}\right]\)| ENG $307 \quad$Poetry |
| :--- |
| ENG $308 \quad$Fiction <br> ENG $309 \quad$ Drama |
| At least three 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), while the third must be outside of American |
| Literature at the 300 level or above................................. 9 |

Major Writers: Shakespeare ..... 3
At least one course in Literary Theory ..... 3

At least two courses in Writing, beyond ENG 101 and 102, one of which must be ENG 303.6
All of the following courses
ENG 412 Literature for Adolescents ..... 3
ENG 452 History of the English Language ..... 3
At least 3 credits of English electives, chosen withthe approval of the major advisor (General Educationand Foreign Language requirements may not bedouble counted.3
TOTAL 4

## CREATIVE WRITING MINOR

The English program coordinates a minor in creative writing, designed for students who are considering pursuing an MFA in creative writing upon graduation. Since, at the graduate level, the MFA degree specializes in either poetry, playwriting, creative non-fiction, or fiction, students minoring in Creative Writing will be required to focus their studies on one genre (Poetry, Fiction, or Playwriting) after completing a series of introductory courses, while at the same time enrolling in elective courses related to their personal writing goals. The minor is primarily geared toward non-English majors who are considering a career in creative writing or a graduate degree (MA or MFA) in their chosen genre.

## Program Goals

- Students will learn a working vocabulary for critical analysis of creative works.
- Students will produce a cumulative portfolio of work that is competitive at a publishable level.


## Outcome Assessment Activities

The Coordinator of the Creative Writing minor reviews student portfolios and evaluates the level of performance demonstrated, tracks the placement of students in graduate programs, and keeps records of publications by students and former students, reporting the results annually.

## Specific Requirements for the Creative Writing Minor

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| ENG 114 | Introduction to Creative Writing ............ 3 |  |

One of the following courses............................................. 3
ENG 315 Creative Writing: Poetry
ENG 316 Creative Writing: Fiction
ENG 317 Creative Nonfiction
ENG 318 Creative Writing: Drama
One of the following pairs, by genre. 6

## Poetry

| ENG | 307 | Poetry |
| :--- | :--- | :--- |
| ENG | 414 | Advanced Writing Workshop |

## Fiction

| ENG | 308 | Fiction |
| :--- | :--- | :--- |
| ENG | 414 | Advanced Writing Workshop |

Creative Nonfiction

| ENG | 414 | Advanced Writing Workshop |
| :--- | :--- | :--- |
| ENG | 440 | Magazine Writing <br> OR |
| ENG | 325 | Nature Writing in the West |


| Playwriting |  |  |
| :--- | :--- | :--- |
| ENG | 309 | Drama |
| ENG | 414 | Advanced Writing Workshop |

At least three of the following courses not used above.... 9

| ENG | 303 | Adv. Comp., Rhetoric, \& Grammar |
| :--- | :--- | :--- |
| ENG | 315 | Creative Writing: Poetry |
| ENG | 316 | Creative Writing: Fiction |
| ENG | 317 | Creative Nonfiction |
| ENG | 318 | Creative Writing: Drama |
| ENG | 325 | Nature Writing in the West |
| ENG | 352 | English Syntax and Usage |
| ENG | 412 | Literature for Adolescents |
| ENG | 440 | Magazine Writing |
| FL | 100 | Introduction to Comparative |
|  |  | Linguistics |

Honors Seminars: as approved by advisor

| MCCNM | 233 | Script Writing |
| :--- | :--- | :--- |
| MCCNM | 402 | Photojournalism |
| PHIL | 102 | Philosophical Literature |
| PHIL | 401 | History of Epistemology Seminar |
| PSYCH | 334 | Perception |
| TH | 111 | Theatre Appreciation |

TOTAL 21

## PROFESSIONAL WRITING MINOR

The English program coordinates a minor in professional writing (18 hours), designed to acquaint students with commercial non-fiction writing, Web writing and design,
publishing, public relations, and the rhetoric and grammar for professional forums. Students may select from two distinct tracks: Professional Writing/Consulting or Design/Publication.

## Program Goals

- Students will gain a working knowledge of writing, editing, and design in interdisciplinary media, including web creation, public relations, magazines, business marketing, and photojournalism.
- Students will create writing and design portfolios in the core courses in order to demonstrate skills for potential employers.


## 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 goals and reports these results annually.

## Specific Requirements for the Professional Writing Minor

## Required Core Courses

| Courses | Titles | Credits |
| :--- | ---: | :--- |
| ENG | 304 | Advanced Composition and Rhetoric ... 3 |
| ENG/MCCNM |  |  |
|  | 440 | Magazine Writing |
|  |  | OR |
| ENG | 326 | Writing for the WEB ............................. 3 |
| ENG | 317 | Creative Nonfiction ............................ 3 |

TOTAL 9

## Professional Writing/Consulting Track

Minor Core
Select nine credits of electives from the following list of courses: .9

| BUSAD | 302 | Ethics in Business |
| :--- | ---: | :--- |
| BUSAD | 480 | Business Consulting |
| ENG | 305 | Technical and Scientific Report |
| ENG | 319 | Professional Editing |
| ENG | 325 | Nature Writing in the West |
| ENG/MCCNM |  |  |
|  | 440 | Magazine Writing |
| MCCNM | 321 | Public Relations Case Problems |
| MCCNM | 422 | Writing for Public Relations |

TOTAL 18

## Design/Publication Track

| Minor Core |  |  |
| :---: | :---: | :---: |
| Select nine credits of electives from the following list of courses: |  |  |
| ART | 372 | Printmaking: Computers and Photo Processes |
| ART | 376 | Photography II |
| ART | 381 | Introduction to Graphic Design II |
| BUSAD | 302 | Ethics in Business |
| ENG | 319 | Professional Editing |
| ENG | 326 | Writing for the WEB |
| MCCNM | 312 | Publication Graphs and Design |
| MCCNM | 402 | Photojournalism |

TOTAL 18

## FOREIGN LANGUAGES PROGRAM

The Foreign Languages Program offers a Bachelor of Arts in Spanish (BA) intended to prepare students for public school teaching and certification, for admission to graduate school, and for careers in international organizations, government, and business.

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.

## Program Goals 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 goals will be achieved by showing proficiency in the 5 C's:

1) Communication: The communication standard stresses the use of Spanish for communication in "real life" situations. It emphasizes "what 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.

## Program Goals 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 project.
2. A second major, minor, or teacher education program.
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 ................................ 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
Two of the following courses $\qquad$
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 for Business Professions
And all of the following:
SPN 310 Introduction to Hispanic Literature 3

Three upper-level electives, of which at least two must be 400-level
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 Spoken French I. ..... 3
FRN 102 Beginning Spoken French II ..... 3
FRN 201 Intermediate French I .....  3
FRN 202 Intermediate French II ..... 3
French Electives above 300* ..... 9

* (in house or through foreign exchange program)
TOTAL 21
Specific Requirements for the Italian Minor
ITL Courses TitlesITL 101 Introduction to Italian I3
ITL 102 Beginning Spoken Italian II ..... 3
ITL 201 Intermediate Italian I ..... 3
ITL 202 Intermediate Italian II. ..... 3
Italian Electives above 300* ..... 9* (in house or through foreign exchange 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 project 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 projects 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: M. Gose

Faculty: Berardi, Carter, Harris, Gose, Loats, Matusiak, Montoya, Rees, Sandoval, Spade

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

## General Requirements

No grade below $C$ is acceptable in the major or minor.

## Core Requirements for the History Major

## HIST Courses Titles <br> 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............................ 3
HIST 202 United States History II........................... 3
HIST 300 Historiography ........................................ 3
HIST 493 Seminar.................................................. 3

TOTAL 21

## Requirements for the Bachelor of Arts Degree in History

Students must complete the "Core Requirements for the History Major" as outlined above, plus 15 hours of history electives. 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 "Core Requirement for the History Major" outlined above, plus 21 hours of history electives (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, the "Social Science Courses Required for Certification" listed below, and all requirements of the Teacher Education Program.

Other Social Science Courses Required for Certification

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ECON | 201 | Principles of Macroeconomics |  |
| GEOG | 101 | Physical Geography |  |
| GEOG | 103 | World Regional Geography |  |
| POLSC | 101 | American National Politics. |  |
| POLSC | 102 | State and Local Governments |  |
|  |  |  | TAL 15 |
| Specific Requirements for the History Minor |  |  |  |
| HIST Courses |  | Titles | Credits |
| Nine hours selected from the following |  |  |  |
| HIST | 101 | World Civilization. |  |
| HIST | 102 | World Civilization to 1100 |  |
| HIST | 103 | World Civilization since 1800 |  |
| HIST | 201 | United States History I... |  |
| HIST | 202 | United States History II.... |  |
| HIST | 211 | Colorado History......... |  |
| PLUS |  |  |  |
| HIST | 300 | Historiography ..... | 3 |
| History Electives app |  |  |  |

TOTAL 21

## Outcomes Assessment Activities

- Demonstrated proficiency in writing coherent and accurate essays on specific topics within the discipline, as determined by the history faculty.
- Portfolios will be maintained for each student who has declared history as a major or minor. Portfolios will include academic transcripts, major papers written for courses in the discipline, and other pertinent information. The portfolios will be on file in the department office. Updated copies of all course syllabi will be kept in a central file in the department office to enable qualified students to discover how courses are adapted towards program goals.


## 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.
Four areas of emphasis are offered in the political science major: public administration and public policy, global studies, American political institutions and politics, and secondary education.

## 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

## General Requirements

- Students in the major must complete a minimum of 36 semester credit hours in political science, including 15 hours in the political science core. Students are required to earn a grade of $C$ or better in all political science courses.
- 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 202 World Politics ...................................... 3
POLSC 240 Political Analysis .................................. 3
POLSC 370 Western Political Thought................... 3
POLSC 493 Seminar .............................................. 3
TOTAL 15

## EMPHASIS AREAS IN POLITICAL SCIENCE

The political science program offers four areas of emphasis: Public Administration and Public Policy; Global Studies; American Political Institutions and Politics, and Secondary Education. Completion of an emphasis area is recommended, but not required for the political science major. The suggested courses for each area are as follows:

## Emphasis in Public Administration and Public Policy

Especially appropriate area for criminal justice, environmental studies, not-for-profit administration and management, and urban and state politics. See a political science advisor for further information.

| POLSC Courses | Titles | Credits |
| :--- | :--- | :--- |
| POLSC |  | Required Core Courses ................... 15 <br> State and Local Government and |
| POLSC 102 | Politics ................................................ 3 |  |
| POLSC 250 | Research Methods in Political <br> Science.............................................. 3 |  |
| POLSC | 330 | Introduction to Public Administration... 3 |
| POLSC | 340 | Public Policy ....................................... 3 |
| POLSC | 480 | Practicum in Politics and Public <br> Service................................................. 6 |
| Political Science Elective ........................................ 3 |  |  |

TOTAL 36

## Emphasis in Global Studies

The Global Studies emphasis helps prepare students for a variety of careers, including jobs in the foreign service, national security, the military, international business, international law, and various global health and humanitarian organizations (to mention just a few). In addition, focusing on Global Studies provides an excellent background for graduate study in many disciplines such as international relations, comparative politics, law, business, and national security studies.

| POLSC Courses | Titles | Credits |
| :--- | :--- | :--- |
| POLSC | Required Core Courses ................. 15 |  |
| POLSC 201 | Comparative Politics ........................... 3 |  |

TOTAL 36

## Emphasis in American Political Institutions and Politics

Pursuing the emphasis area in American Political Institutions and Politics will prepare students for careers in political campaigning, legislative or administrative service, the law, and public policy development. In addition, the emphasis area will provide the necessary writing and critical thinking skills for graduate and law school.

| POLSC CoursesPOLSC |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
|  |  | Required Core Courses .. | ...... 15 |
| POLSC | 102 | State and Local Government and Politics $\qquad$ | ....... 3 |
| POLSC | 480 | Practicum in Politics and Public Service $\qquad$ | $.3$ |
| Political Science |  | lectives from the following: | 15 |
| POLSC | 250 | Research Methods in Political Science |  |
| POLSC | 300 | Political Parties and Elections |  |
| POLSC | 320 | Constitutional Legal Research |  |
| POLSC | 321 | American Constitutional Development |  |
| POLSC | 323 | Criminal Law \& Procedure |  |
| POLSC | 324 | Family Law |  |
| POLSC | 340 | Public Policy |  |
| POLSC | 405 | The American Presidency |  |
| POLSC | 411 | Legislatures \& Legislation |  |
| POLSC | 473 | American Political Thought |  |

TOTAL 36

## Emphasis in Secondary Education

The Secondary Education emphasis prepares students for teaching at the middle and high school level. Students must complete the "Core Requirements for the Political Science Major" listed above, 15 hours of political science electives, the "Social Science Courses required for Certification" listed below, and all requirements of the Teacher Education Program.

Other 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 |
| HIST | 101 | World Civilization to 1100 |
| HIST | 102 | World Civilization from 1100-1800 OR |
| HIST | 103 | World Civilization Since 1800 .............. 3 |
| HIST | 201 | U.S. History I |
| HIST | 202 | U.S. History II |

TOTAL 21

## Specific Requirements for the Political Science Minor

| POLSC Courses Titles |  |  | Credits |
| :---: | :---: | :---: | :---: |
| POLSC | 101 | American National Politics. |  |
| POLSC | 201 | Comparative Politics |  |
|  |  | OR |  |
| POLSC | 202 | World Politics. | ........ 3 |
| POLSC | 240 | Political Analysis............... | ........ 3 |
| Political Science Electives........................................ 12 |  |  |  |

## Outcomes Assessment Activities

- Demonstrated proficiency in writing coherent and accurate essays on specific topics within the discipline, as determined by the political science faculty.
- A portfolio will be maintained for each student who has declared Political Science as a major. It will include transcripts, major papers written for courses in the discipline, co-curricular data, and other pertinent information. The portfolios will be on file in the department.


## PHILOSOPHY PROGRAM

The minor in philosophy complements majors and careers in politics, law, literature, health care, business, technologies, and the liberal arts.

## Program Goals

- To provide individual courses as well as an academic minor in general philosophy;
- To help students understand and appreciate the great ideas from philosophy, to see such ideas in relation to the cultural settings, to develop the abilities to think, speak, and write in a clear, analytical manner, and to allow students to develop a viable philosophy of life.


## Expected Student Outcomes

## 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 |  |
| PHIL | 201 | Classics in Ethics. |  |
| PHIL | 204 | Critical Reasoning OR |  |
| PHIL | 205 | Deductive Logic .. | .... 3 |
| PHIL | 293 | History of Philosophy Se | .... 3 |
| PHIL | 393 | History of Philosophy Se | .......... 3 |
| PHIL | 493 | History of Philosophy Se | ......... 3 |

TOTAL 18

## Outcomes Assessment Activities

- Students must demonstrate proficiency in writing defenses of theses on philosophical topics as determined by the philosophy faculty.


## 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.

## LIBERAL STUDIES PROGRAM

## 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.

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 standardsbased 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.


## 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., Measure of Academic Proficiency and Progress-MAPP) and senior level (PRAXIS 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.

The Teacher Education Board, consisting of faculty from each Liberal Studies discipline, will have primary responsibility for evaluation of the program; and the Associate Dean for Education will assume responsibility for gathering program evaluation information and reporting to the Board.

## 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 |  |
| ENG | 102 | Composition II. |  |
| MATH | 156 | Introduction to Statistics.. |  |
| General Education Knowledge Requirements |  |  |  |
| Courses |  | Titles | Credits |
| BIOL | 100 | Principles of Biology |  |
| BIOL | 100L | Principles of Biology Lab | ... 1 |
| ENG | 130 | Introduction to Literature.. |  |
| GEOG | 103 | World Regional Geography |  |
| GEOL | 101 | Earth Science |  |
| GEOL | 101L | Earth Science Lab |  |
| PSYCH | 151 | Intro to Human Development | ... 3 |
| SPCOM |  | Speaking and Listening ....... | .... 3 |
| One of the following:................................................. 3 |  |  |  |
| ART | 100 | Visual Dynamics |  |
| MUS | 118 | Music Appreciation .......... |  |
| One of the following:................................................ 3 |  |  |  |
| HIST | 101 | World Civilization to 1100. |  |
| HIST | 102 | World Civilization from 1100 to 1800. |  |
| HIST | 103 | World Civilization since 1800.. |  |

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

Courses Titles Credits
ENGLISH (5 hours)

| ENG | 351 | Children's Literature................................ 2 |
| :--- | :--- | :--- |
| ENG | 303 | Adv. Comp., Rhetoric, and Grammar.... 3 |

## FINE ARTS (3 hours)

One of the following (not completed for General Education):3
ART 100 Visual Dynamics ..... 3
MUS 118 Music Appreciation .....  3
TH 11 Theatre Appreciation ..... 3
MATH (9 hours)
MATH 360 Elem. Concepts of Mathematics I......... 3
MATH 362 Problem Solving for Elementary Teachers ..... 3
MULTICULTURAL STUDIES (3 hours)
CS $420 \quad$ Voices of Protest ..... 3
(Other approved multicultural courses may be added)
SCIENCE (4 hours)
PHYS ..... 150/
CHEM 150 Elementary Concepts in Physics and Chemistry ..... 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 following concentration areas of 12 hours. All students should meet with an advisor in the area of concentration and develop the goals to be achieved by completion of the concentration and 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 otherdepartments; at least 6 hours must be numbered300 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 |
| EXHP | 232 | First Aid ........................................... 2 |
| EXHP | 382 | Lifestyle Disease Risk Reduction......... 3 |
| HISTORY |  |  |
| HIST | 201/or |  |
|  |  | U.S. History I/II (whichever class not completed in core) $\qquad$ |
| HIST | 300 | Historiography .................................. 3 |
| History courses numbered 300 or above........................ 6 |  |  |
| LANGUAGE AND LINGUISTICS |  |  |
| ANTHR |  | Language Thought \& Culture............... 3 |
| ENG | 352 | English Syntax and Usage.................. 3 |
| FL | 100 | Intro to Comparative Linguistics .......... 3 |
| SPCOM |  | Language Acquisition and Linguistics... 3 |
| LEADERSHIP |  |  |
| US | 160 | Introduction to Leadership .................. 3 |
|  | 260 | Leadership in Service Organizations .... 3 |
| US | 360 | Applied Leadership........................... 3 |
| US | 460 | Working with Experienced Leaders ..... 3 |
| (Prerequisite: Acceptance into President's Leadership |  |  |
| Program) |  |  |
| MATH |  |  |
| MATH | 126 | Calculus \& Analytic Geometry I ........... 5 |
| MATH | 207 | Matrix and Vector Algebra .................. 2 |
| MATH | 224 | Calculus and Analytic Geometry II....... 5 |
| MODERN FOREIGN LANGUAGE |  |  |
| All students will be required to complete a Placement Test to determine the level at which they will begin a language. |  |  |
| Twelve hours in the language will be planned with a language faculty advisor. |  |  |
| FRENCH |  |  |
| FRN courses .................................................... 12 |  |  |
| ITALIAN |  |  |
| ITL courses ..................................................... 12 |  |  |
| SPANISH |  |  |
| SPN courses ..................................................... 12 |  |  |
| MUSIC |  |  |
| MUS | 100 | Music Fundamentals I: Notation .......... 2 |
| MUS | 105 | Music Fundamentals II: Foundations .... 2 |
| MUS | 118 | Music Appreciation (if taken as core course, 3 elective hours may be taken.) ........................... 3 |ENG

Numbered 300 or above ..... 9EXHP
EXHP 232 First Aid ..... 2HISTORYHIST 300 Historiography3
History courses numbered 300 or above. ..... 6ANTHR 106 Language ThougENG 352 English Syntax and Usage.3SPCOM 260 Language Acquisition and Linguistics3
LEADERSHIPUS 360Applied Leadership............................... 33(Prerequisite: Acceptance into President's LeadershipProgram)
MATH
Matrix and Vector Algebra ..... 2

## MODERN FOREIGN LANGUAGE

All students will be required to complete a Placement Test to determine the level at which they will begin a language. The hours in the language will be planned with a

FRENCH
$\qquad$

ITL courses
SPN courses ..... 12
MUS ..... MUS 105
Music Fundamentals II: Foundations .... 2 (if taken as core course, 3 elective hours may be taken.) ..... 3
MUS 127 Functional Piano Class ..... 1
MUS 160-179 Applied Lesson ..... 2
VARIES Music Ensemble ..... 2
MUS 101 Music Performance Symposium I ..... 0
POLITICAL SCIENCE
POLSC 240 Political Analysis ..... 3
POLSC courses numbered 300 or above ..... 9
PSYCHOLOGY
PSYCH 251 Childhood and Adolescence ..... 3
9 hours from the following ..... 9
PSYCH 220 Drugs \& Behavior ..... 3
PSYCH 231 Marriage \& Family Relationships . .....  3
PSYCH 311 Theories of Personality .....  3
PSYCH 336 Learning .....  3
PSYCH 337 Memory \& Cognition ..... 3
PSYCH 352 Social Psychology ..... 3
PSYCH 353 Adv. Developmental Psychology .....  3
PSYCH 362 Abnormal Psychology. .....  3
PSYCH 463 Psychopathology of Childhood .....  3
PSYCH 465 Behavior Modification ..... 3

## SCIENCE

One Biology, One Chemistry, and One Physics Course and Labs; examples include:
BIOL 121/L Environmental Conservation/Lab. ..... 4
BIOL 191/L College Biology I/Botany/Lab. ..... 5
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 SocialBehavior 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

# MASS COMMUNICATIONS DEPARTMENT AND CENTER FOR NEW MEDIA 

Department Chair: Jennifer Mullen

Faculty: Bregar, Ebersole, Joyce, Lovato, Mullen, Orman, 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 in which technological innovation is grounded in 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 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 credits hours. Selected courses may have course specific fees.

The TODAY news magazine and online site are published as laboratory tools of the Mass Communications Department. The newspaper serves 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.

KTSC-FM is licensed to CSU-Pueblo as an educational radio station by the Federal Communications Commission. Operated by the Mass Communications department, the 10,000 -watt station serves a 50 -mile radius of the campus. 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 Public Broadcasting full-power station affiliated with Rocky Mountain Public Broadcasting and CPB, provides laboratory training and on-campus labs 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 Goal

The primary goal of the Mass Communications Department/Center for New Media is to offer a pragmatic and professionally oriented program aimed at preparing majors for successful careers in the media and related areas and to prepare students for graduate study.

## Expected Student Outcomes

## 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 semester. This central pool of materials describes the detailed expectations and accountability elements for the Mass Communications/Center for New Media major on a course-by-course basis.
- Consistent with general CSU-Pueblo policy, no student enrolled in Mass Communications/Center for

New Media 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/ 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.


## THE MASS COMMUNICATIONS/CENTER FOR NEW MEDIA MAJOR

## Specific Requirements for the Major Core



## CHOOSE ONE OF THREE EMPHASIS AREAS

Specific Requirements for the Emphasis in Electronic Media

Advisors: Sam Ebersole and Sam Lovato

| 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

Advisors: Jennifer Mullen and Patricia Bowie Orman

## 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 <br> 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 |  |
| MCCNM | 311 | Copy Editing.. |  |
| MCCNM | 312 | Publication Graphics and | gn ...... 3 |
| MCCNM | 445 | Reporting Public Affairs | ......... 3 |
|  |  |  | TAL 15 |

## MCCNM Applied Electives: 9 credits required

| MCCNM Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| MCCNM | 211 | Desktop Publishing .............................. 3 |
| MCCNM | 232 | Website Design......................... 3 |
| MCCNM | 233 | Script Writing............................. 3 |
| MCCNM | 238 | Multimedia Applications .................... 3 |
| MCCNM | 245 | Digital Audio and Video Production... 3 |
| MCCNM | 260 | Digital Photography........................ 4 |
| MCCNM | 282 | Digital Media Post Production ......... 3 |
| MCCNM | 350 | Advanced Media Lab ...................... $1-3$ |
| MCCNM | 494 | Field Experience .................... Varies |

Other MCCNM course can be selected with advisor approval. Prerequisites may exist with some courses.

## Co-curricular Requirements

1) The thrust of the Mass Communications Department/Center for New Media is pragmatic, therefore, all students are encouraged to be involved in opportunities provided by participation in the following 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, promotion, talent)
- KTSC-TV/RMPBS on-campus television station (studio production)
- CNM Productions (field production)

Media labs are at the discretion of the faculty advisor. Students may earn a maximum of 9 credits in media labs.
2) In addition, Mass Communications/Center for New Media majors and minors are encouraged to join and participate in additional co-curricular activities on campus and through community and University projects.

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 8 hours of internship credit.

## Specific Requirements for the Mass Communications/ 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 and 201. 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, in order to be eligible for graduation with the required 2.0 in the minor. Students who earn grades of below $C$ will be required to repeat the course in order to be considered for a minor in Mass Communications.

## 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 major or minor is encouraged to maintain an academic portfolio of all salient work or projects completed while in the department. Department faculty will review and evaluate a selection of portfolios in the spring of each year to track student progress. Each emphasis area adviser also maintains a file.

The Mass Communications Department/Center for New Media insists 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.

A student may be required to participate in an exit interview during his or her final semester. Students are selected on a random basis from enrollments in the department's capstone course, Mass Media Seminar.

## MILITARY SCIENCE (US ARMY)

(Reserve Officers' Training Corps Program)
Professor of Military Science: Lieutenant Colonel James Desjardin; Assistant Professors of Military Science: Captain Andrew Koontz, Senior Military Science Instructors: Master Sergeant Antonio Cruz, Sergeant First Class Gener Molina

## The Army ROTC Program

The focus of this program is to recruit, 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. Students who participate will be required to contract before attending. 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 "level playing field" for the purpose of making those assessments. Successful completion of the course is mandatory for commissioning.

## Course Offerings

## Basic Course

## Courses <br> Titles <br> Credits

MSL 101
MSL 102
MSL 201
MSL 202
Leadership \& Personal Development (F)....... 1 Introduction to Tactical Leadership (S) .......... 1
Innovative Team Leadership (F).................... 2
Foundations of Tactical Leadership (S)
.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) .............. 3

## 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


## 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.

## MUSIC DEPARTMENT

## Department Chair: Mark Hudson

Faculty: Barto, Beck, Cantu, Chi, Crafts, Creager, Crowe, Duncan, De Luca, Eastin, Eberhardt, Evans, Hollingsworth, Ihm, Markowski, Mills, Pannunzio, Plumer, Reid, Scott, Shadle-Peters, Sizer, Turner, Veronika String Quartet (Afanassieva, Dobrotvorskaia, Garibova, Artmann)

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 sufficiently 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.


## 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 must successfully complete an approved minor or a minimum of 18 hours in subject areas other than music with a cumulative GPA of 2.5 or better. For the music education emphasis, education is the appropriate minor.

## 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 complete successfully the piano proficiency requirement in order to graduate. 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 further their 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 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

MUS Courses $\begin{array}{ll}\text { Titles } & \text { Credits }\end{array}$
MUS 151 Aural Skills I.............................................. 1
MUS 210 Music Theory II....................................... 3
MUS 211 Aural Skills II........................................... 1

| MUS | 250 | Music Theory III.................................. 3 |
| :---: | :---: | :---: |
| MUS | 251 | Aural Skills III..................................... 1 |
| MUS | 280 | Music Theory IV ................................. 3 |
| MUS | 281 | Aural Skills IV ..................................... 1 |
| MUS | 305 | Music History I |
|  |  | OR |
| MUS | 355 | Music History II................................... 3 |
| MUS | x01 | Music Performance Symposium............. 0 (6 semesters) |
| MUS | xxx* | Primary Ensemble $\qquad$ <br> (6 semesters, 2 upper division) |
| MUS | xxx** | Secondary Ensemble $\qquad$ <br> (2 semesters, 1 upper division) <br> (Note: Music Ed emphasis exempt from this credit requirement.) |
| MUS | xxx | Major Applied Lesson $\qquad$ 12 <br> (6 semesters, 2 upper division) |
| MUS | 127 | Functional Piano I: Beginning................. 1 (may be repeated) |
| MUS | 227 | Functional Piano II: Int./Proficiency ........ 1 (may be repeated) |
| MUS | 103 | Music \& Computer Technology I ........... 1 |
| MUS | 303 | Music \& Computer Technology II .1 $\qquad$ <br> (Note: Music Education majors must take MUS 306 in lieu of MUS 303. See Music Education Emphasis Requirements.) |
| MUS | 357 | Orchestration and Arranging ................ 3 |
| MUS | 358 | Basic Conducting ............................... 2 |

TOTAL 48 (Music Ed 45)
Note: Piano student complete either of the following in lieu of Functional Piano courses:

| MUS | 346 | Piano Literature |
| :--- | :--- | :--- |
| MUS | 347 | OR |
| Piano Pedagogy ................................. 2 |  |  |

## TOTAL 2

Free Electives 35-37

Degree Total
*Primary ensembles: (All courses MUS)

|  | $\underline{\text { Fr }}$ | $\underline{\text { Soph }}$ | $\underline{\text { Jr }}$ | $\underline{\mathbf{S r}}$ |
| :--- | ---: | :--- | ---: | ---: |
| Concert Choir | 102 | $\underline{202}$ | 302 | 402 |
| 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 |
| String Orchestra | 144 | 244 | 344 | 444 |

**Secondary Ensembles: (All courses MUS)

|  | $\frac{\mathrm{Fr}}{}$ | $\underline{\text { Soph }}$ | $\underline{\mathrm{Jr}}$ | $\underline{\mathbf{S r}}$ |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Vocal Jazz Ensemble | 108 | 208 | 308 | 408 |
| Vocal Ensemble | 109 | 209 | 309 | 409 |
| Brass Ensemble | 114 | 214 | 314 | 414 |
| Mariachi Ensemble | 115 | 215 | 315 | 415 |
| Chamber Ensemble | 121 | 221 | 321 | 421 |
| Percussion Ensemble | 124 | 224 | 324 | 424 |
| Pep Band | 131 | 131 | 331 | 331 |
| Woodwind Ensemble | 134 | 234 | 334 | 434 |
| Jazz Ensemble | 154 | 254 | 354 | 454 |
| Marching Band | 230 | 230 | 430 | 430 |

NOTE: Ensembles are determined by the student's declared performance area. See advisor if further information is required.

Specific Requirements Bachelor of Arts in Music: Music Performance Emphasis


TOTAL 14
Note: Vocal students must also complete the following:

MUS 323 Diction for Singers ............................... 2
Note: Piano students must also complete the following:

[^1]MUS $347 \quad$ Piano Pedagogy .................................. 2

Music Electives ........................................................ 19-23
Degree Total ............................................................... 120

NOTE: Social Science requirements must include PSYCH 251 (Childhood and Adolescence).

## Music Education Emphasis Requirements

| MUS Courses | Titles <br> Music History I | Credits |
| :--- | :--- | :--- |
| MUS | 305 | OR |
| MUS | 355 | Music History II (other than core) ....... 3 |
| MUS | 306 | Technology for Music Educators <br> (in lieu of MUS 303) ........................... 2 <br> Music Performance Symposium ....... 0 <br> (1 semester) |
| MUS | x01 | Senior Recital ............................................ |

## Education Requirements

| Courses |  | Titles | Credits |
| :--- | :--- | :--- | :--- |
| ED | 202 | Foundations of Education .................. 3 |  |
| ED | 301 | Frameworks of Teaching ................. 3 |  |
| RDG | 435 | Content Area Literacy ..................... 4 |  |
| ED | 412 | Teaching Diverse Learners............. 3 |  |
| ED | 485 | Capstone Seminar.......................... 2 |  |
| ED | 489 | Student Teaching K-12................ 12 |  |

## TOTAL 27

Degree Total ............................................................... 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 is 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 sections, 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.

In brief, the Music Emphasis consists of 12 credit hours in core areas:

- Current Issues in Music Education.
- Music Literature and Analysis (targeting school performing organizations).
- Advanced Conducting (for secondary level) or Kodaly Methods (for elementary).
- Research Topics in Music Education.

Six additional credit hours are to be completed according to the student's own needs in the following areas:

- Advanced Pedagogy (Brass, Percussion, Strings, Woodwinds, Voice, and Piano).
- Applied Lessons.
- Graduate ensembles (contingent on enrolled personnel).

The remaining degree requirements are outlined in the Master of Education section of this catalog. Descriptions of these courses may be found in the Course Descriptions section.

## 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
The Minor in Non-Profit Administration is a multidisciplinary program designed for students wanting to pursue careers in non-profit organizations that include the arts, human services, recreation, chambers of commerce, civic efforts, and health care. A variety of suggested electives allows student to focus their coursework toward the type of non-profit 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.

## Specific Requirements for the Non-Profit Administration Minor

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| MCCNM | 370 | Nonprofit Organizations and |
|  |  | Communication................................. 3 |
| POLSC | 330 | Introduction to Public Administration |
|  |  | OR |
| ACCTG | 201 | Principles of Financial Accounting ........ 3 |
| PSYCH | 315 | Industrial/Organizational Psych |
|  |  | OR |
| MGMT | 201 | Principles of Management |
|  |  | OR |
| MCCNM | 210 | Intro to Integrated Communication ....... 3 |

Elective Courses: 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 ................................. 3 |
| BUSAD | 270 | Business Communication ................... 3 |
| ECON | 202 | Microeconomics................................ 3 |
| ECON | 330 | Public Finance ................................... 3 |
| ENG | 303 | Adv. Comp., Rhetoric. \& Grammar ....... 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 | Desktop 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 | 130 | Cultures of the Spanish-Spkg World..... 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: L. Madrid

Faculty: Bridgmon, Kulkosky, 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

- Psychology graduates should have factual knowledge about significant theories, issues, and methods of inquiry. They should be able to compare the major theoretical perspectives represented in psychology.
- Psychology graduates should have acquired the skills needed to comprehend basic psychological concepts such as critical thinking, statistical thinking, and identifying valid and invalid conclusions based on empirical evidence.
- Graduates should be able to read and write complex prose, to comprehend journal articles, and to present a coherent and persuasive argument on a psychological topic.
- Graduates should have skills of information gathering and synthesis including appropriate use of library and internet materials and the ability to derive conclusions after surveying a variety of sources.
- Psychology graduates should be able to demonstrate an understanding of theoretical biases, especially as they relate to minority groups and sexist thinking.
- Students should gain practical experience in the form of relevant volunteer activities, field experience, work experience, or research assistantships.


## 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 requirement as stated in the Academic Policies section of the University catalog. This requirement includes completion of the second semester of a foreign language, or completion of FL 100 and ANTHR/ENG 106, or completion of the first and second semester 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 |  |  |
| :---: | :---: | :---: |
| PSYCH | 100 | General Psychology |
| PSYCH | 103 | Introductory Psychology for Majo |
| PSYCH | 207/L | Quantitative Research Methods I/Lab... 4 |
| PSYCH | 209/L | Quantitative Research Methods II/Lab.. |
| 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 Psychology |
| PSYCH | 315 | Industrial/Organizational Psych |
| PSYCH | 342 | Educational Psychology |
| PSYCH | 471 | Clinical Psychology |

## 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 Intro to 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 .................................. 2
PSYCH 251 Childhood and Adolescence.................. 3
PSYCH 351 Psych of Exceptional Individual ............ 3
PSYCH 381 Principles of Psychological Testing I.... 4
PSYCH 410 Advanced Data Analysis....................... 3
PSYCH 420 Human Evolutionary Psych.................... 3
PSYCH 463 Psychopathology of Childhood .............. 3
PSYCH 464/L $\begin{array}{ll}\text { Systems of Counseling and } \\ \text { Psychotherapy/Lab............................... } 4\end{array}$
PSYCH 465 Behavior Modification ............................ 3
PSYCH 475 Group Process....................................... 3
PSYCH 492 Research...........................................1-3
PSYCH 494 Field Experience..............................4-12
PSYCH 495 Independent Study ............................1-3
Basic Core Requirements ................................................ 32
Psychology Electives ..................................................... 10
TOTAL 42
All students are required to declare a minor or earn 18 credits in the Humanities and/or the Social Sciences (ANTHR, ART, CS, ECON, ENG, FL, FRN, GEOG, GER, HIST, ITL, MCCNM, MUS, PHIL, POLSC, RUS, SOC, SPCOM, SPN, WS) 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.

## 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.

## Requirements for the Psychology Minor

- Twenty credits of psychology, which must include PSYCH 100 and nine credits of upper-division coursework. Credits in PSYCH 494 and 495 do not count toward the minor. A maximum of three credits of PSYCH 495 may count towards the minor if the project undertaken is research based.
- A minimum grade of $C$ in all psychology courses counting toward the minor.

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 | Credits |
| :--- | :--- | :--- | :--- |
| 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 |
| PSYCH | 463 | Psychopathology of Childhood ..... 3 |
| PSYCH | 465 | Behavior Modification .................. 3 |

## 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.

## SOCIAL WORK DEPARTMENT

Department Chair: Carol Langer

Faculty: Baca, Gonzales, Noel, Reilly-Sandoval

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.

## Social Work Program Mission

The Social Work Program's mission is to prepare students for beginning generalist social work practice across client systems. The program is committed to promoting social and economic justice through excellence, creativity, and innovation. The curriculum incorporates a strong knowledge, value, and skill base. As a Hispanic Serving Institution, there is an emphasis on understanding, appreciating, and developing competent practice with the Chicano/Chicana community and other regional populations of the southwestern United States.

## Social Work Program Goals

The goals of the Social Work Program are to:

- Prepare students for beginning generalist practice with individuals, families, groups, organizations, and communities;
- Prepare students for lifelong learning, communication, and critical thinking skills through an educational process which integrates a liberal arts foundation with professional social work education;
- Prepare students for culturally competent practice with diverse populations, with an emphasis on the Chicano/Chicana community, First Nations peoples, and other indigenous regional populations of the southwestern United States;
- Prepare students to utilize critical thinking as beginning generalist practitioners with diverse client populations in work with individuals, small groups, organizations and communities;
- Prepare students to understand the forms and dynamics of power, oppression, and discrimination and to develop skills to effectively advocate for social and economic justice with individuals, families, groups, organizations, and communities;
- Prepare students for professional practice based on the values and ethics of the social work profession;
- Prepare students for generalist practice with rural, immigrant, and migrant client populations;
- Prepare students for generalist practice with populations-at-risk; and
- Provide students with knowledge, values, and skills necessary to successfully complete graduate education.


## Program Objectives

Upon successful completion of the program, students will be able to:

- Apply critical thinking skills to generalist social work practice;
- Apply the values and ethics of the social work profession with various client systems;
- Apply generalist practice skills from a strengths perspective in work with diverse populations of various sizes, with emphasis on Chicanos/Chicanas, First Nations and indigenous people, rural, immigrant, and migrant populations representative of the southwestern United States;
- Understand and integrate the history of the social work profession and the social welfare system into practice;
- Apply theoretical knowledge of the biological, psychological, social, cultural, and spiritual factors that impact the development, behavior, beliefs and values of client systems of various sizes across the life span;
- Understand and analyze the impact of social policies on diverse client systems of various sizes;
- Differentially and effectively use communication skills with a variety of client populations, colleagues, and members of the community;
- Understand the forms of oppression and discrimination;
- Apply strategies to eliminate or alleviate discrimination and oppression;
- Apply knowledge and strategies to effect change in the larger society;
- Evaluate research and incorporate results into practice;
- Demonstrate an understanding and appreciation of cultural diversity;
- Apply strategies which enhance the well-being and social functioning of individuals, families, groups, communities, organizations, and the larger society;
- Demonstrate the professional use of self;
- Apply knowledge and skills in utilizing community and agency resources to meet basic needs of client systems and/or develop needed resources;
- Apply generalist practice skills from a strengths perspective in work with populations-at-risk; and
- Demonstrate an appropriate use of professional knowledge, values, and skills to effect change with individuals, families, groups, communities, organizations, and the larger society.

Coursework leading to the Bachelor of Social Work (BSW) degree involves the development of knowledge, values, and skills inherent in the social work profession from a person-in-environment strengths perspective. Courses required for the major incorporate a broad liberal arts base to promote critical thinking and an appreciation and understanding of diversity.

## 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......... 36 credit hours
$\qquad$
Basic social work courses ................................................ 15

## 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 |
| :--- | :--- | :--- | :--- |
| BIOL | 100 | Principles of Biology ......................... 3 <br> Intro to Chicano Studies |  |
| CS | 101 |  |  |
| OR |  |  |  |

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 Environment I |  |
| SW | 202 | Human Behavior \& Social Environment II | ....... 3 |
| SW | 205 | Social Welfare in the U.S.. | ...... 3 |
| SW | 222 | Intro to Social Work Practice | ......... 3 |
|  |  |  | TAL 15 |

## 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 300 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 semester, 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 semester. Faculty review applications and a decision 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. 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 | urses | Titles | Credits |
| :---: | :---: | :---: | :---: |
| SW | 310 | Social Work Theory | . 3 |
| SW | 320 | Human Diversity in Practice. |  |
| 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 | Field Seminar I . | . 3 |
| SW | 482 | Field Seminar II. | . 3 |
| SW | 488 | Field Placement I. | ..... 5 |
| SW | 489 | Field Placement II | ..... 5 |
| SW | 492 | Research | ....... 3 |

## Admission into the Social Work Field Practicum

## The Field Practicum

Social work majors are required to apply for admission into the field practicum. An orientation meeting is scheduled by the Field Coordinator each fall 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. Applications for field placement are accepted only once a year, with exceptions approved by the Field Coordinator.

Completed applications must be returned to the Field Coordinator for review and approval no later than the third week of January. Upon receipt, 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.

## 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.

Inappropriate behaviors will be discussed with the student and corrective actions identified. Students have the opportunity to appeal decisions through the due process procedures available through the University.

## 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. The following elective courses are offered in social work:

| SW Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| SW | 230 | Chicano: Social \& Psychological |  |
|  |  | Study .................................... | ....... 3 |
| SW | 290 | Special Projects. | ...1-5 |
| SW | 325 | Health in the Chicano Community | y ....... 3 |


| SW | 326 | Social Work Practice with Older <br> Adults ............................................... 3 <br> Practice with Abused and |
| :--- | :---: | :--- |
| SW | 327 |  |
| Neglected Children ........................................... 3 |  |  |

# SOCIOLOGY/ANTHROPOLOGY/ SOCIAL SCIENCE DEPARTMENT <br> (Including Criminology) 

Department Chair: I.M. Gomme
Faculty: Calhoun-Stuber, Forsyth, Gomme, Green, McGettigan, Messer

The programs in sociology, anthropology and social science are intended to increase the student's knowledge of social organization and social relationships, knowledge that can be applied to many career objectives in government and business.

## SOCIOLOGY

Sociology is the study of human social behavior and is concerned with conditions such as crime and delinquency, family problems, social inequality, and organizations in contemporary industrial society. Sociologists are interested not only in understanding social issues and institutions, but also in resolving social problems.

As an applied program, the major prepares students to work in a wide variety of occupations, including education, government, business, industry and private human service agencies. They are employed in such areas as health care, youth services, drug rehabilitation, law enforcement, corrections, probation, and counseling. Students may receive a general sociology degree, or they may specialize within the criminology emphasis area and receive a sociology/criminology degree.

The major in sociology leads to the Bachelor of Arts (BA) and the Bachelor of Science (BS). The BS is designed for those pursuing an applied, career-oriented program, while the BA requires a foreign language. Both degrees prepare students for graduate studies and applied careers.

## Sociology Program Goals

- Graduates will be able to compare and contrast the major theoretical perspectives that inform modern sociological analysis.
- Graduates will be able to apply a range of research methods in conjunction with sociological theory in order to explain and analyze complex social relations and organizations.
- Graduates will be able to apply social analysis to the substantive social area of their emphasis: criminology or general sociology, and will be able to present findings in a clear, understandable and concise manner.
- Graduates will be able to engage in critical thinking about the relationship between social and personal experiences.
- Minors will have an understanding of the significant theories, issues and methodologies of the discipline.
- Minors will have an understanding of the impact of social processes and institution on personal experiences.


## Expected Student Outcomes

## General 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

## 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 |

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
SOC/ANTHR
SOC/ANTHR 252
SOC
SOC
soc/ws
SOC
SOC
SOC
SOC/PSYCH
SOC
SOC
SOC
SOC
SOC
SOC
SOC/ANTHR
SOC/ANTHR
SOC/WS
SOC
SOC
SOC
soc/WS
SOC
SOC
SOC
SOC
SOC
SOC

Marriage \& Family Relationships
The Sacred in Culture
Culture and Personality
Collective Behavior and Social
Movements
303 Crime and Deviance
305 Crime and Women*
306 Delinquency \& Juvenile Justice
308 Popular Culture*
320 Modern Social Perspectives*
352 Social Psychology
353 Penology*
354 Urban Sociology*
355 Political Sociology*
356 Social Stratification*
358 Film \& Society*
359 Community Corrections*
401 Health, Culture, \& Society
402 Aging, Culture, \& Society
403 Human Sexuality and Social Behavior
404 Poverty*
405 Law and Society*
406 Sociology of Small Groups
407 Family Violence*
408 Science, Technology, \& the Future*
409 Victimology*
410 Structural \& Elite Crime*
411 Police and Society*
412 Occupations \& Professions
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/HIST/WS 428 | Women and Work |  |
| SOC | 430 | Industrial Organization* |
| SOC | 431 | Work in Modern America* |
| SOC | 432 | Organization Theory* |
| SOC | 440 | Correctional Administration* |
| SOC | 448 | Emotions in American Culture |
| 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.

## Outcome Assessment Activities

- Completion of all required courses.
- The department believes that grades are one valid indicator of the quality of student work. No grade below $C$ will, therefore, be accepted toward the major or minor.
- Student achievement will be assessed in the outcome areas on the basis of a standardized national achievement test.
- For the sociology minor, grades will provide a valid measure of student performance. The department will examine and maintain records of grades of students minoring in sociology as one means of assessment.


## 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 academic as well as to life experiences.

## Anthropology Program Goals

- Students will be able to deal with intellectual problems and engage in critical thinking in a lucid fashion, reflecting logical inquiry and knowledge of pertinent information.
- Students will possess knowledge and experience of cultural and sub-cultural groups other than their own.
- Students will achieve an understanding of a spectrum of anthropological sub-divisions and will be knowledgeable in at least two areas.


## 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.

## Outcome Assessment Activities

- The assessment of anthropology students' progress is a continuing process from matriculation to graduation.


## 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 "people-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, social work, corrections/ criminology, social and educational administration, law and mass communications.

## Program Goals

- Prepare students to function as knowledgeable and responsible individual citizens in society;
- Prepare students for leadership roles within the broader society;
- Instill in students a broad understanding of the major disciplinary approaches to the study of social life, including economics, history, sociology, geography, and political science;
- Prepare students for participation in modern social institutions, as well as for the coming changes and conflicts within those institutions; and
- Instill in students an awareness of and appreciation for the cultural and ethnic diversity of modern society.


## Expected Student Outcomes

## 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 (public speaking, sign language, and gender communication emphasis) are offered within the Department of English and Foreign Languages.

For information contact the Speech Communication Program Coordinator, Lisa Bamber, at (719) 549-2623.

## WOMEN'S STUDIES

A women's studies minor offers you a different perspective on things you think you know. Analysis of gender issues for men and women helps you understand your major discipline in different ways. This analysis inherently incorporates issues of race, ethnicity, class, and other variables as well.

The women's studies minor is designed to acquaint students with current scholarship on women, scholarship that crosses many disciplines. The minor is interdisciplinary and multicultural, and courses incorporate classroom and experiential learning. Students are asked to examine relevant questions and issues from a range of perspectives, enhancing their analytical and critical thinking skills in the process.

## Specific Requirements for the Women's Studies Minor

| Courses | Titles |  |
| :--- | ---: | :--- |
| WS | 100 | Introduction to Women's Studies ........ 3 |

## WS Electives:

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| WS/SOC | 206 | Gender and Society .......................... 3 |
| WS/PSYCH | CH 211 | Women and Society......................... 3 |
| WS/PSYCH | CH 212 | Sexism and Racism in America ......... 3 |
| WS/NSG | 230 | Women, Health, and Society ............. 3 |
| WS/PSYCH/SOC |  |  |
|  | 231 | Marriage, Family, and Relationships... 3 |
| WS/MCCNM | NM 235 | Women and Media........................... 3 |
| WS/CS | 240 | Chicana Writers ............................... 3 |
| WS/SOC | 305 | Crime and Women ........................... 3 |
| WS/CS | 306 | La Chicana..................................... 3 |
| WS/MCCNM | NM 330 | Gender and Film .............................. 3 |
| WS/ENG/SPCOM |  |  |
|  | 335 | Gender and Communication .............. 3 |
| WS/ENG | 340 | Women in Literature......................... 3 |
| WS/CS | 401 | Third World Feminisms ..................... 3 |
| WS/SOC | 403 | Human Sexuality and Social |
|  |  | Behavior........................................ 3 |
| WS/SOC | 407 | Family Violence............................... 3 |
| WS/HIST | - 427 | Women \& Gender in European |
|  |  | History .3 |
| WS/HIST/SOC |  |  |
|  | 428 | Women \& Work............................... 3 |
| WS/SOC | 453 | The Sociology of the Body ................ 3 |
| WS/SOC | 455 | Hate Crimes................................... 3 |
| WS | 490 | Special Projects ...................... 2-6 Var |
| WS 291 | 291/491 | Special Topics (topics vary) ............... 3 |
| WS | 492 | Research ............................... 2-6 Var |
| WS | 493 | Seminar ......................................... 3 |
| 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

(through WS 490, 492, 493, 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, WS 301, and 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 549-2811.

## COLLEGE OF SCIENCE AND MATHEMATICS

Dr. Richard M. Kreminski, Dean

## Academic Departments

## Biology

Majors: Biology (BS)
Emphasis Areas:
Biology Secondary Certification
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
Cellular and Molecular Biosciences
Bioinformatics
Medical Terminology
Environmental Biosciences
Environmental Health
Environmental Technology
Pre-Ecology
Pre-Forestry/Wildlife
Applied Natural Science (MS)
Emphasis Area:
Biological Sciences
Minors: Biology
Professional Biology

## Chemistry

Majors: Chemistry (BS)
Emphasis Areas:
ASC Certified
Biochemistry
Pre-Medicine
Pre-Pharmacy
Pre-Veterinary
Secondary Teaching Certification
Applied Natural Science (MS)
Emphasis Areas:
Biochemical Sciences
Chemical Sciences
Minors: Chemistry
Forensic Science

## 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 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 K-12 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 a master of science in applied natural sciences (MSANS) with emphasis areas 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 curriculum, 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), forensic science, 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 internship 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 newly 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 and equipment in the curriculum, providing graduates advanced skills and a competitive edge within respective professions in our modern and technologically advanced society.

## MASTERS DEGREE IN APPLIED NATURAL SCIENCE 3+2 PLAN (BS/MS)

A unique and distinct feature in the MSANS program is the $3+2$ plan. The $3+2$ plan 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 MSANS program by the Spring semester of their junior year (preferred) or by the start of the Fall semester of the senior year. Students applying to the $3+2$ plan must have a minimum 3.0 overall GPA and a minimum 3.25 GPA in their subject emphasis area (biology, biochemistry, or chemistry - see below).

The application file for admission to the $3+2$ plan must include:

1. A completed MSANS application form;
2. A CSU-Pueblo transcript;
3. Two letters of recommendation from CSU-Pueblo faculty; and
4. GRE scores (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 MSANS program to remain in the program).

Before being admitted to the $3+2$ plan, students are expected to have completed or be taking the following course work depending on the respective emphasis areas in which they have interest.

## Biology Emphasis:

| 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 |

## Biochemistry or Chemistry Emphasis:

| 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 |

The core course requirements and all other requirements for the $3+2$ plan are the same as for the regular MSANS 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 the MSANS 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. Like students in the regular MSANS program plan, students admitted under the 3+2 plan may chose either the thesis or non-thesis (internship) program option.

Additional information about the MSANS program and its requirements is found in the MSANS section listed in the Graduate Programs section of the catalog.

## BIOLOGY DEPARTMENT

Interim Department Chair: Helen Caprioglio

Faculty: D. Caprioglio, Diawara, Gabaldón, Herrmann, Martínez, Seilheimer, Smith, Vanden Heuvel

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-forestry, pre-optometry, pre-physical therapy, pre-occupational therapy, prepharmacy, pre-physician 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. Each student should 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

## 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 required to demonstrate intellectual skills and knowledge in math and supporting sciences.
- Graduates are encouraged to complete a minor outside the biology department.
- Biology majors are expected to demonstrate knowledge of basic laboratory tools used in biology for observation and analysis, phylogenetic relationships, relationships between form and function, and population/ecological dynamics.


## Biology graduates are expected to:

1) Read critically, think reflectively, and review historical and current literature in the biological sciences;
2) Apply basic knowledge of the related fields of chemistry, mathematics and physics to problemsolving in biology;
3) Formulate logical hypotheses;
4) Design and carry out well-designed, well-controlled tests of scientific hypotheses;
5) Have a knowledge of basic biology terminology;
6) Have a broad-based background in molecular, cellular, organismic and ecological biology; and
7) Gather information and present it accurately in oral and written reports.

## Core Requirements for the Biology Major

$\begin{array}{lll}\text { BIOL Courses } & \text { Titles } & \text { Credits } \\ \text { BIOL } 171 & \text { Career Planning I................................. } 1\end{array}$
BIOL 191/L College Biology I/Botany/Lab................. 5
BIOL 192/L College Biology II/Zoology/Lab ............. 5
BIOL 212/L Intro to Cellular Biology/Lab.................. 3
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.............................. 4
OR
BIOL 413/L Plant Physiology/Lab ............................. 4
OR
BIOL 414/L Vertebrate Physiology/Lab.................... 4
BIOL 493 Seminar ................................................. 1
TOTAL 31

## - Basic Biology Emphasis

Required Biology Core Courses ..... 31
Advisor-Approved Upper Division Biology Electives ..... 14

## 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
MATH 156 Introduction to Statistics ..... 3
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
SPCOM 103 Speaking and Listening (H) ..... 3
TOTAL ..... 38
Institutional and General Education ..... 21
General Electives ..... 16
Total credit hours ..... 120

## - 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 semesters 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 Titles Credits
Biology Required Core.................................................... 31
BIOL 453/L Ecology/Lab.......................................... 4
BIOL 462 Environmental Management................. 3
Advisor approved Upper Division Biology Electives .......... 7
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 prepares students for careers in forensics. Consult with academic advisor for specific requirements.

## Cellular and Molecular

Basic Biology Emphasis with the following required courses:

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| Biology required core with BIOL 412/L $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ | 31 |  |

TOTAL 45

## Bioinformatics

Courses Titles Credits
Biology required core with BIOL 412/L............................ 31
BIOL 351L $\begin{aligned} & \text { Advanced Genetics \& Molecular } \\ & \text { Biology Lab........................................... } 2\end{aligned}$
CHEM 411 Biochemistry I....................................... 3
BIOL 450/L Survey of Genomics and
Bioinformatics/Lab 3

Advisor approved Upper Division Biology Electives .......... 4
TOTAL 43
Required Support Courses

| Course |  | 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 | Intro 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 CreditsRequired Biology core with BIOL 493 orCHEM 493, Seminar31
Advisor Approved Biology electives ..... 9
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 ..... 8
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 ..... 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
TOTAL 39
Institutional and General Education ..... 21
Total credit hours ..... 121-123


## - Biology Secondary Certification Emphasis

| Course |  | Titles Credits |
| :---: | :---: | :---: |
| BIOL | 191/L | College Biology I/Botany/Lab.............. 5 |
| BIOL | 192/L | College Biology II/Zoology/Lab ............ 5 |
| BIOL | 212L | Intro to Cell Biology/Lab..................... 3 |
| 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 |
| Biology | Upper | Division Field 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 <br> Approach $\qquad$ |
| PHYS | 201/L | Principles of Physics I/Lab................. 4 |
| PHYS | 202/L | Principles of Physics II/Lab................. 4 |

## TOTAL 62-64

Education Minor ............................................................. 37
Institutional and General Education to
include the following courses: 24

PSYCH 151 Intro to Human Development
SPCOM 103 Speaking and Listening (grade of B or better required)

Total credit hours 123-125

## - 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 191/L College Biology I/Botany/Lab ..... 5
BIOL 192/L College Biology II/Zoology/Lab ..... 5
Approved Upper-division Electives ..... 10
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.

## Outcomes Assessment Activities

## Biology Majors

Assessment of students' improvement in intellectual skills, knowledge and capacities from entrance to graduation will be accomplished through the use of several tools. Exams will be used as one measure of the student's proficiency in writing skills, acquisition of knowledge, problem solving and laboratory skills. All majors will take a Senior Seminar that requires oral and written presentations. Seniors will also take the Biology Field Achievement Test, which measures Colorado State University-Pueblo students against national norms.

## CHEMISTRY DEPARTMENT

Department Chair: David Lehmpuhl<br>Faculty: Bonetti, Dillon, Druelinger, Farrer, Kinney, Wilkes

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
7) Forensic Science Minor

## Expected Student Outcomes

## 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 overall 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.


## 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.


## Specific Requirements

The following common core is required for all of the chemistry emphasis areas for the Bachelor of Science Degree:

CHEM Courses Titles $\quad$ 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
TOTAL 40

- 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 TitlesRequired Chemistry Core40
CHEM 323 Experimental Physical Chemistry .....  2
Approved Elective (CHEM or MATH 156) ..... 3

TOTAL

## 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 |  |

$\overline{\text { TOTAL } 20}$
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 |  |

$\overline{\text { TOTAL } 20}$
Institutional and General Education ................................. 24
Free Electives .................................................................... 1
Approved Minor.............................................................. 20
TOTAL 45
Total credit hours........................................................ 120

## - Biochemistry Emphasis

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| Required Chemistry Core. |  |  | 40 |
| CHEM | 411 | Biochemistry I | . 3 |
| CHEM | 412/L | Biochemistry II/Lab . |  |
| Approved CHEM Elective $\qquad$ (CHEM 492 or 495 strongly suggested) |  |  |  |
|  |  |  | TOTAL 51 |
| Other Required Courses |  |  |  |
| Courses |  | Titles | Credits |
| BIOL | 191/L | College Biology I/Botany/Lab | ab.............. 5 |
| BIOL | 192/L | College Biology II/Zoology/L | Lab ............ 5 |
| BIOL | 301/L | General Microbiology/Lab.. | ............... 5 |
| BIOL | 350 | Mendelian and Population G | Genetics ..... 2 |
| BIOL | 351/L | Molecular Biology and Gene | etics/Lab .... 4 |
| BIOL | 412/L | Cellular Biology/Lab........ | ............... 4 |
| MATH | 126 | Calculus \& Analytic Geometry | try I ........... 5 |
| MATH | 224 | Calculus \& Analytic Geomet | try II .......... 5 |
| PHYS | 221/L | General Physics I/Lab ..... | ............... 5 |
| PHYS | 222/L | General Physics II/Lab... | ..... 5 |
|  |  |  | TOTAL 45 |
| Institutional and General Education |  |  | ............. 24 |
| Total credit hours ................................................. 120 |  |  |  |
| - Double Major Emphasis |  |  |  |
| Required Chemistry Core $\qquad$ 40 (Including either major seminar course) |  |  |  |
|  |  |  | TOTAL 40 |
| Other Required Courses |  |  |  |
| Courses |  | Titles | Credits |
| MATH | 126 | Calculus \& Analytic Geometr | etry I ........... 5 |
| MATH | 224 | Calculus \& Analytic Geomet | try II .......... 5 |
| PHYS | 201/L | Principles of Physics I/Lab. OR | $\qquad$ |
| PHYS | 221/L | General Physics I/Lab......... | .................. 5 |
| PHYS | 202/L | Principles of Physics II/Lab. OR | ................... 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 TitlesCHEM 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
BIOL 100/L Principles of Biology /Lab ..... 4
BIOL 121/L Environmental Conservation/Lab. ..... 4
GEOL 101/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/L General Physics II/Lab ..... 5
PSYCH 151 Intro to Human Development ..... 3
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
ED 444 Teaching Secondary Science ..... 4
RDG 435 Content Area Literacy ..... 4
ED 485 Capstone Seminar in Education ..... 2
ED Student Teaching SecondaryOR
ED 489 Student Teaching K-12 ..... 12
TOTAL ..... 72
General Education ..... 21
Total credit hours ..... 122-125


## - 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 |  |  |

TOTAL 20

## - Forensic Science Minor

| Courses |  | Titles Credits |
| :---: | :---: | :---: |
| CHEM | 111/L | Principles of Chemistry/Lab |
|  |  | OR |
| CHEM | 121/L* | General Chemistry I/Lab..................4-5 |
| CHEM | 211/L | Intro to Organic Chemistry/Lab |
|  |  | OR |
| CHEM | 301/L* | Organic Chemistry I/Lab ..................4-5 |
| CHEM | 160/L | Intro to Forensic Science/Lab .............. 4 |
| CHEM | 260/L | Forensic Chemistry I/Lab.................... 4 |
| Electives |  | See elective list below ....................... 3 |
|  |  | TOTAL 19-21 |
| POSSIBLE ELECTIVES |  |  |
| Electives chosen from the following (or as approved by the |  |  |
| Minor Advisor): |  |  |
| Courses |  | Titles Credits |
| CHEM | 311 | Survey of Biochemistry ....................... 3 |
| CHEM | 460/L* | Forensic Chemistry II/Lab................... 4 |
| PSYCH |  | Drugs and Behavior........................... 3 |
| PSYCH 491* |  | Forensic Psychology <br> (taught under Special Topics) |
| PSYCH 362* ANTHR/SOC |  | Abnormal Psychology ........................ 3 |
|  |  |  |
|  | 416 | Crime and the Mind ........................... 3 |


| ANTHR/SOC |  |  |
| :--- | :--- | :--- |
|  | 451 | Culture/Deviance/Psychopathology ....... 3 |
| SOC | 415 | Forensic Criminology ....................... 3 |
| BIOL | $223 / \mathrm{L}$ | Human Physiology \& Anatomy I/Lab .... 4 |
| BIOL | $301^{*}$ | General Microbiology............................ 3 |
| BIOL | $351^{*}$ | Molecular Biology \& Genetics............ 2 |
| BIOL | $3511^{*}$ | Advanced Genetics \& Molecular |
|  |  | Biology Lab ......................................... 2 |
| ENG | 305 | Technical \& Scientific Report Writing.... 3 |
| MATH | 156 | Intro to Statistics ................................. 3 |

*NOTE PREREQUISITES IN CATALOG

## 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

## Outcomes Assessment Methods

- 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 in general chemistry, organic chemistry, analytical chemistry and physical chemistry 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, Louisell, Lundberg, Melnykov, Nichols, Poritz

The major in mathematics leads to the degree of Bachelor of Arts (BA) or Bachelor of Science (BS). A flexible curriculum allows students to prepare for graduate school, for teaching careers, or for employment in areas that require mathematics (such as actuarial science, computer science, engineering, or statistics). Faculty advisors work individually with mathematics majors and minors to design programs of study. A list of advisors is available in the departmental office.

Students need to be aware that mathematics courses have prerequisites. Thus, many mathematics courses must be taken in a particular order.

## Program Goals

- To promote the development of attitude of mind and problem-solving skills required for efficient use, appreciation and understanding of mathematics.
- To provide students with mathematical proficiency necessary to be successful in the study of science, business, economics, engineering, technology, or education.
- To provide majors with a quality background in: differential and integral calculus for functions of one and several variables; linear and abstract algebra; probability; and applications of mathematics.
- To prepare mathematics majors for a successful transition to business, government, industry, teaching, and/or graduate school.
- To sustain, promote, and support the learning of mathematics in our service area.


## Expected Student Outcomes

## General Requirements

- All mathematics majors must complete the mathematics core curriculum: MATH 126, 207, 224, 307, 325, 327, 350 and 421. 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 twosemester 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

## 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 <br> Applications ......................................... 2 |
| MATH | 224 | Calculus \& Analytic Geometry II .......... 5 |
| MATH | 307 | Intro to Linear Algebra ..................... 4 |
| MATH | 325 | Intermediate Calculus ..................... 3 |

TOTAL 46

## 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 | Intro to Human Development............ 3 |  |
| PSYCH | 342 | Educational Psychology................... 3 |
| RDG | 435 | Content Area Literacy ........................... 4 |

## TOTAL 36

Laboratory Science Sequence ......................................... 10
Computer Programming .................................................... 4
Elective............................................................................... 3

TOTAL 17

General Education............................................................ 21
Total credit hours......................................................... 120

| Courses | Titles | Credits |
| :---: | :---: | :---: |
| MATH 126 | Calculus \& Analytic Geometry I . | ....... 5 |
| MATH 224 | Calculus \& Analytic Geometry II | ........ 5 |
| Electives inclu (Excluding M | ing three upper-division courses* $\text { H } 360,361,362 \& 477)$ | $\text { . } 10$ |

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 <br> MATH <br> Matrix \& Vector Algebra with |
| MATH | 207 | Applications .................................. 2 <br> MA4 <br> Calculus \& Analytic Geometry II ........... 5 |
| MATH | 307 | Introduction to Linear Algebra............ 4 |
|  |  | OR |

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 |  |  |  |
|  | 171 | Intro to Java Programming ................. 4 |  |
|  | 242 | Intro to Computation with MATLAB ...... 4 |  |
| MATH |  |  | 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 <br> Applications ........................................ 2 |
| MATH | 224 | Calculus \& Analytic Geometry II .......... 5 |
| MATH | 307 | Intro to Linear Algebra .................... 4 |
| MATH | 325 | Intermediate Calculus ..................... 3 |

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................. 1
PHYS 493 Seminar ............................................... 1
TOTAL 34

## 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 |
| Computer Programming |  |  | .... 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 semester 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

## 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 ..... 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 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 ..... 1
PHYS 499 Thesis Research. ..... 1
TOTAL ..... 40
Other Required Courses
Courses Titles Credits
CHEM 121/L General Chemistry I/Lab ..... 5
CHEM 122/L General Chemistry II/Lab. ..... 5
MATH 242 MATLAB Programming ..... 4OR
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
General Education ..... 24
Electives. ..... 17-19
Total credit hours ..... 120
Specific Requirements for the Engineering Emphasis
PHYS Courses Titles ..... Credits
PHYS 221/L General Physics I/Lab ..... 5
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 Titles Credits
CHEM 121/L General Chemistry I/Lab........................ 5
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 I ..... 3
EN 324/L Material Science \& Engineering/Lab..... 4EN 441 Engineering of ManufacturingProcesses.............................................. 4
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 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 General Chemistry I/Lab ..... 5
CHEM 122/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
Approved electives in biology ..... 32
OR ..... 22Approved electives in chemistry
TOTAL 53-64
General Education ..... 24
Electives. ..... 11-0
Total credit hours ..... 120*A MATH/PHYSICS double major is also available in thedepartment. (See MATH department requirements.)
Specific Requirements for the Physics Secondary Certification Emphasis
PHYS Courses TitlesPHYS 110Astronomy.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 Thermodynamics/Lab ..... 4
PHYS 323/L General Physics III/Lab ..... 5

Other Required Courses
Courses Titles Credits
BIOL 100/L Principles of Biology/Lab ..... 4
BIOL 121/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
GEOL 101/L Earth Science/Lab ..... 4
MATH 126 Calculus \& Analytic Geometry I ..... 5
MATH 224 Calculus \& Analytic Geometry II ..... 5
PSYCH 151 Intro to Human Development. ..... 3
PSYCH 342 Educational Psychology ..... 3
RDG 435 Content Area Literacy ..... 4
TOTAL ..... 62
General Education ..... 21
Total credit hours ..... 128
Specific Requirements for the Minor in Physics
PHYS Courses Titles ..... 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/Lab ................................... 4 |  |  |
| PHYS | 150 | Elementary Concepts in Physics <br> and Chemistry I...................................... 4 |  |
|  |  | and |  |
| PHYS | 201/L | Principles of Physics I/Lab................ 4 |  |
| PHYS | 202/L | Principles of Physics II/Lab............... 4 |  |
| CHEM | 111/L | Principles of Chemistry/Lab................ 4 |  |
| EN | 103 | Problem Solving for Engineers ............. 3 |  |
| GEOL | 101/L | Earth Science/Lab ............................. 4 |  |

                                    \(\overline{\text { TOTAL } \quad 27}\)
    
## 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. Michael Fronmueller, Dean

## HSB Majors and Minors

Majors: Accounting (BSBA)
Business Management (BSBA)
Emphasis Areas:
Information Technology
Marketing
Computer Information Systems (BS)
Economics (BSBA)
Joint BSBA/MBA
Joint BS-CIS/MBA
MBA
(See the Graduate Studies section of this catalog for more information.)

Minors: Accounting
Business Administration
Computer Information Systems
Computer Security
Economics
Marketing
Nonprofit Management
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 to advance into a graduate program. Our programs prepare students through achievement of four primary learning goals.

## 1) Communication

Our students will be able to communicate effectively.
2) Quantitative and Decision Making/Critical Thinking Skills

Our students will be able to analyze problems and develop solutions.
3) Global Awareness

Our students will understand the global business environment.

## 4) Ethical Awareness

Our students will understand concepts related to ethics.

## Undergraduate Majors

The Hasan School of Business offers undergraduate degrees in accounting, business management, business management with an information technology emphasis, business management with a marketing emphasis, computer information systems, and economics. Graduates will be able to successfully compete for appropriate entry-
level positions in private firms, non-profit 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 degree 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, non-profit organizations or government, as well as, positions in banking, financial analysis, and related financial services industries.

Students graduating from CSU-Pueblo with undergraduate degrees in business must earn a 2.0 cumulative GPA and a minimum grade of $C$ or better in all business core, skills, and major/emphasis area course work.

NOTE: Students planning to take professional certification exams in any field are encouraged to consult with their faculty advisor to understand any additional requirements.

## Undergraduate Minors

The goal of the Accounting minor is to provide a solid foundation in financial and managerial accounting systems.

The goal of the Business Administration minor is to provide students with an understanding of the fundamentals of accounting, economics, finance, and the basics of managing a business and marketing a product or service.

The goal of the CIS minor is to provide a basic understanding of information systems and areas of specialization within the information technology field.

The goal of the Economics minor is designed to provide students with an understanding of microeconomics and macroeconomics, income distribution, and the ability to apply such principles to current economic problems.

The goal of the Marketing minor is to provide students with an understanding of how marketing activities - using a customer focus - can be used to sell products, services and ideas successfully.

The goal of the Nonprofit Management minor is to provide students with the basic management skills needed to provide effective managerial oversight in non-profit organizations.

The goal of the Supervisory Management minor is to provide a basic understanding of the complexity of managing people in organizations.

A cumulative GPA of 2.000 is required in the minor courses.

## 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 students who are declaring a business major for 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, domestic and worldwide. The Business Core is designed to provide students with the opportunity to integrate their educational experience in business within a specific discipline and across disciplines.

## Skills Courses

| Courses |  | Titles |
| :--- | :--- | :--- | | Credits |
| :--- |
| CIS | 103 PowerPoint and Web Publishing ........... 1

## TOTAL 7

*Note: a grade of $C$ or better is required. Math 221 requires a prerequisite of Math 121 or the equivalent.

## 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 OR |
| MATH | 156 | Introduction to Statistics ....................... 3 |
| BUSAD | 270 | Business Communications ................... 3 |
| ECON | 201 | Principles of Macroeconomics............... 3 |
| ECON | 202 | Principles of Microeconomics ................ 3 |
| MGMT | 201 | Principles of Management.................... 3 |
| MGMT | 301 | Organizational Behavior ...................... 3 |
| BUSAD | 302 | Ethics in Business .............................. 3 |
| BUSAD | 360 | Advanced Business Statistics ............... 3 |
| FIN | 330 | Principles of Finance ........................... 3 |

MGMT 311 Operations \& Quality Mgmt. ..... 3
MKTG 340 Principles of Marketing ..... 3
MGMT 485 Management Policy \& Strategy ..... 3
BUSAD 493 Business Seminar. .....  .1
TOTAL ..... 44

A cumulative GPA of 2.000 in the major and Business Core is required. All business majors are required to earn a C or better in all skill courses, Business Core courses, and 3/400-level major courses. In addition, students should have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses.

## Majors and Emphasis Areas

(Specific course requirements are detailed later.)

## Select one:

Accounting ..... 24
Business Management. ..... 24
Business Management/Information Technology ..... 21
Business Management/Marketing ..... 24
Economics ..... 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.

A cumulative GPA of 2.000 in the major and Business Core is required. All business majors are required to earn a C or better in all skill courses, Business Core courses, and 3/400-level major courses.

## Credit Policy

To earn a BSBA from CSU-Pueblo, Students must complete no less 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 Department Chair. Courses taken without such approval will not be counted toward the fulfillment of degree requirements.

Only the Dean or the Department 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 College.

Definitive articulation agreements have been established between the Hasan School of Business and all two-year public institutions in Colorado. Information is available in Admissions and Records and on the CSU-Pueblo Web site. For a detailed explanation of transfer credit, please see the Admission section of this catalog.

## Summary of Graduation Requirements (Accounting, Business Management, and Economics)

General Education ..... *36
Skills. ..... 7
Other Non-Business. ..... 15
Business Core ..... *38
Major. ..... 24
TOTAL (minimum credits) ..... 120
*ECON 201 and ECON 202 are counted in GeneralEducation.

## Summary of Graduation Requirements (CIS):

General Education ..... *36
Quantitative Analysis Requirement ..... 10
Required Related ..... 9

Electives........................................................................... 13
Major ............................................................................... 52
TOTAL (minimum credits) ..... 120
*Must include SPCOM 103 or equivalent; ECON 201 and 202, and MATH 121.

## Co-Curricular Opportunities

Co-curricular activities are encouraged for all 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

## 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.

## 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, conducted nationwide, assesses what students have learned primarily in courses common to all business majors (areas F \& G). Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally, who have taken the exam that year. In the Hasan School of Business, the Major Fields Test is given to students in the BUSAD 493 capstone course in their senior year. The Hasan School of Business also administers the graduate ETS Exam in the MBA program at the end of students' course work.
- Course-Embedded Measures. Exams, papers, presentations, and projects are course-embedded measures that can be modified to reveal student performance data in ways that course grades might not. Faculty in the MBA program also use courseembedded measures for program assessment.

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, business, and CIS majors are advised in the Hasan School of Business. Students are required to meet with an HSB advisor each semester to plan their course schedules for the upcoming semester. In addition, consulting with an advisor is necessary in declaring a business major, applying for an internship and filing a graduation planning sheet.

## ACCOUNTING MAJOR

Faculty: Eriksen, Fort, 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.

## Goals for the Accounting Major

Students must demonstrate the knowledge or skills of:

- Financial accounting and theory and practice, including revenue and expense recognition, valuation approaches, preparation and analysis of financial statements; and
- Cost and managerial accounting, including cost accounting, planning, evaluation, allocation, and budgeting processes.


## Requirements for the Accounting Major

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ACCTG | 301 | Intermediate Accounting I. | 3 |
| ACCTG | 302 | Intermediate Accounting II.... | .... 3 |
| ACCTG | 311 | Federal Income Tax | . 3 |
| ACCTG | 320 | Cost Accounting | 3 |
| ACCTG | 401 | Advanced Financial Accounting | .... 3 |
| ACCTG | 404 | CPA Law . | . 3 |
| ACCTG | 410 | Auditing .. |  |
| ACCTG | 430 | Accounting Information Systems | ....... 3 |

TOTAL 24

## 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 |

$$
\text { TOTAL } 21
$$

A GPA of 2.000 or higher is required for the minor.

## BUSINESS MANAGEMENT MAJOR

Faculty: Ahmadian, Billington, Brennan, Fowler, Fronmueller, Gilbreath, Hanks, Norman, Shah, Wakefield, Waronska

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 emphasis as a specialty area. The knowledge and skills acquired with the major in business management can be used in a number of areas, including 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.

## Goals for the Business Management Major

Students must demonstrate core business knowledge or skills in:

- Organization concepts including various design arrangements;
- Human resource management to include effective practices of recruitment, training and development, appraisal, compensation, and motivation; and
- Interpersonal relationships and effective small-group project management.

Students must also demonstrate knowledge or skills that are specific to their selected emphasis area (management, marketing or information technology) and

- Understand and use appropriate emphasis area terminology, principles, and concepts;
- Analyze critical case situations specific to the emphasis area; provide reasonable recommendations and support recommendations adequately; apply relevant emphasis area theories, concepts, and techniques; and integrate the primary functional disciplines of business; and
- Understand the role of the appropriate emphasis area in corporate policy and strategy development.


## Requirements for the Business Management Major

| Course |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| MGMT | 318 | Human Resource Management |  |
| MGMT | 365 | Management Information System | ........ 3 |
| MGMT | 475 | International Management OR |  |
| MKTG | 475 | International Marketing | .... 3 |
| MGMT | 3/400 | Electives.. | . 9 |
| Busines | elect | ves (3/400-level) |  |

TOTAL 24

## Requirements for the Business Management Major with Information Technology Emphasis

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| MGMT | 318 | Human Resource Management.. | ........ 3 |
| MGMT | 368 | Project Management ....... |  |
| MGMT | 475 | International Management OR |  |
| MKTG | 475 | International Marketing. | 3 |
| CIS | 311 | Web Development. |  |
| CIS | 350 | Data Base Systems. | . 3 |
| CIS | 3/400 | Elective.. | 3 |
| Business | CIS | Elective (3/400-level). | ... 3 |

TOTAL 21

## Additional Requirements

(Replaces the 15 credits of other Non-Business electives in the Business Management graduation requirements)

| Courses |  | Titles | Credits |
| :--- | ---: | :--- | ---: |
| CIS | 150 | Computer Information Systems ............ 3 |  |
| CIS | 171 | Java Programming .............................. 4 |  |
| CIS | 185 | PC Architecture .................................... 3 |  |
| CIS | 240 | Object Oriented Analysis and Design.... 3 |  |
| CIS | 289 | Network Concepts............................... 3 |  |
| Open Elective | ................................................ 2 |  |  |

## Requirements for the Business Management Major with Marketing Emphasis

| Courses | Titles | Credits |
| :--- | :--- | :--- |
| MGMT | 365 | Management Information Systems......... 3 |
| MKTG | 348 | Consumer Behavior.......................... 3 |
| MKTG | 441 | Marketing Strategies....................... 3 |
| MKTG | 475 | International Marketing........................ 3 |
| MKG | $3 / 400$ |  |
| Electives.................................... 6 |  |  |

TOTAL 24

## Business Administration Minors

## Requirements for the Business Administration Minor (open to non-business majors only)

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ACCTG | 201 | Financial Accounting |  |
| ACCTG | 202 | Managerial Accounting. | ...... 3 |
| ECON | 201 | Principles of Macroeconomics. | ...... 3 |
| ECON | 202 | Principles of Microeconomics . | ..... 3 |
| FIN | 330 | Principles of Finance .. | ...... 3 |
| 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
Select three of the following:
MKTG 341 Sales Force Management ...................... 3
MKTG 342 Promotional Strategy.............................. 3
MKTG 348 Consumer Behavior................................ 3
MKTG 475 International Marketing........................... 3
TOTAL 21

## Requirements for the Nonprofit Management Minor (open to non-business majors only)

Courses Titles Credits

ACCTG 201 Financial Accounting ............................... 3
ECON 202 Principles of Microeconomics ................. 3
BUSAD 270 Business Communication....................... 3
MGMT 201 Principles of Management...................... 3
MKTG 340 Principles of Marketing ........................... 3

## Select three of the following:

MGMT 301 Organizational Behavior.......................... 3
MGMT 318 Human Resource Management.............. 3
MGMT 349 Management of Service Business.......... 3
ECON 330 Public Finance....................................... 3
FIN 330 Principles of Finance .............................. 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.)

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

# COMPUTER INFORMATION SYSTEMS DEPARTMENT 

Faculty: Cho, Howell, Huff, Long, Martinez, Spencer

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 three options for gaining proficiency in the field of computer security, which has been identified as one of the fastest growing occupations over the next 10 years. These include: a Computer Security option within the CIS major, a minor in Computer Security for non-CIS majors, and a Computer Security certificate for non-degree seeking students awarded by the CIS department.

## Program Objectives

The key objectives of the CIS degree are to:

1. Prepare the graduate for an entry-level position in the information systems (IS) field.
2. Provide the graduate with a foundation for continued career growth as an IS professional.

## Learning Outcomes for Graduates

To function effectively as IS professionals, graduates must achieve proficiency in each of the following areas:

- Technology
- Information Systems
- Analytical and Critical Thinking
- Interpersonal, Communication, and Team Skills
- Business Environment

The general learning outcomes in each area are summarized below.

In the area of technology, the graduate will be able to:

- Design and develop desktop and web-based applications using modern programming tools, techniques, and architectures.
- Design and develop internet-based systems using sound web design principles and multi-tiered architectures.
- Model, design, and develop database systems, including administrative processes and procedures for database management.
- Develop and configure safe and secure systems infrastructures that incorporate hardware, telecommunications, systems software, operating system, and systems configuration components.

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. The graduate will be able to:

- Perform all facets of a modern systems analysis and design methodology, including systems implementation.
- Plan, schedule and coordinate all tasks and activities involved in IT project management.


## 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: Must include 3 credits of SPCOM 103 or equivalent

Social Science: Must include ECON 201 and ECON 202
Mathematics: Must include MATH 121

## Quantitative Analysis Requirement

| Courses | Titles | Credits |
| :--- | :--- | ---: |
| MATH 221 | Applied Calculus..................................... 4 |  |
| MATH 156 | Introduction to Statistics <br> OR |  |
| BUSAD 265 | Inferential Statistics and <br>  <br> BUSAD 360 | Problem Solving................................... 3 <br> Advanced Business Statistics ............ 3 |

## Required Related Courses

| BUSAD 270 | Business Communications ........................ 3 |  |
| :--- | :--- | :--- |
| MGMT | 201 | Principles of Management ................... 3 |

## CIS Major Courses:

|  | rses | Titles Credits |
| :---: | :---: | :---: |
| CIS | 100 | Intro to Word \& 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 | Intro to Java Programming ................... 4 |
| CIS | 185 | PC Architecture .................................. 3 |
| CIS | 240 | Object-Oriented Analysis \& Design ........ 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)

|  | urses | Titles Credits |
| :---: | :---: | :---: |
| CIS | 356 | XML Programming.............................. 3 |
| CIS | 359 | Advanced Programming with C\# ........... 3 |
| CIS | 360 | IT Security ......................................... 3 |
| CIS | 401 | Network Systems Admin ...................... 3 |
| CIS | 402 | Linux Networks \& Routing .................... 3 |
| CIS | 411 | Internet Server-Side Programming........ 3 |
| CIS | 450 | Database Systems II ........................... 3 |
| CIS | 461 | IT Security Management ..................... 3 |
| CIS | 462 | Computer Forensics ............................ 3 |
| 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.

## Computer Security Option for CIS Majors

CIS majors can earn the Computer Security option by completing the following 12 CIS elective credits which satisfy the 12 emphasis area electives listed in the CIS Major Courses:

| CIS Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| 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 |

## CIS MINORS

Non-CIS majors who wish to minor in CIS have several options. They may select a minor in Computer Security, or they may build their own minor based on the completion of seven core courses and one of four separate tracks. Students must complete a minimum of six credits of upper-division CIS courses.

## Computer Security Minor

The computer security minor prepares the graduate for positions in the IT security field, including IT security specialist and IT security administrator. A minor extends training in the profession to majors in a variety of fields. Course requirements are:

```
CIS Courses Titles Credits
CIS 185 PC Architecture .................................. 3
CIS 289 Network Concepts............................... }
CIS 315 Unix Operating Systems...................... }
CIS 360 IT Security ......................................... }
CIS 461 IT Security Management ...................... }
CIS 462 Computer Forensics ............................. }
CIS 401 Network Systems Administration
    OR
CIS 402 Linux Networks and Routing .................. }
                                    SUB-TOTAL 21
```


## Computer Information Systems Minor

```
Students who prefer a minor other than Computer Security complete the following core and one of the listed tracks.
```


## CIS Minor Core

| CIS Courses | Titles | Credits |
| :--- | :---: | :--- | ---: |
| CIS | 100 | Introduction to Word and Windows........ 1 |
| CIS | 103 | PowerPoint \& Web Publishing .............. 1 |
| CIS | 104 | Excel Spreadsheets...................................................................................... |
| CIS | 105 | MS Access DBMS ........ |
| CIS | 150 | Computer Information Systems .......... |
| CIS | 171 | Introduction to Java Programming....... |
| CIS | 240 | Object Oriented Analysis and Design.... 3 |

## SUB-TOTAL 14

## Personal Computers/Local Area Network Support

| CIS Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| CIS |  | Minor Core | 14 |
| CIS | 185 | PC Architecture |  |
| CIS | 289 | Network Concepts |  |
| CIS | 401 | Network Systems Administration OR |  |
| CIS | 402 | Linux Networks and Routing.... | .... 3 |

TOTAL 23

## Information Analyst

| CIS Courses | Titles | Credits |
| :--- | :--- | :--- | ---: |
| CIS |  | Minor Core............................................ 14 |
| 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



## COMPUTER SECURITY CERTIFICATE

Non-degree seeking students may earn a Computer Security certificate from the CSU-Pueblo CIS program by completing the course requirements for the CIS Computer Security minor. Students interested in the certificate program should contact the CIS department for further information.

## ECONOMICS MAJOR

Faculty: Duncan, 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, non-profit organizations or government. The major in economics also prepares the graduate for positions in banking, financial analysis, and related financial services industries.

## Goals for the Economics Major

Students majoring in economics must demonstrate that they:

- Understand microeconomic theories of production and consumption, including strategic behavior and decision making under uncertain conditions.
- Understand macroeconomic models, including classical, Keynesian, monetarist, new classical and new Keynesian systems, including applications of monetary and fiscal policies in the different models.
- Understand the specific theories studied in their elective courses, which may include money and banking, international economics, public finance, regional economic analysis and labor economics.


## Requirements for the Economics Major

| Courses |  | Titles | Credits |
| :---: | :---: | :---: | :---: |
| ECON | 301 | Intermediate Macroeconomics | ....... 3 |
| ECON | 302 | Intermediate Microeconomics . | ..... 3 |
| ECON | 475 | International Economics OR |  |
| FIN | 475 | International Finance | ..... 3 |
| ECON/FIN | 3/400 | Electives... | . 9 |
| Business e | ectives | (3/400-level). | ..... 6 |

## 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 | 301 | Intermediate Macroeconomics............ 3 |
| ECON | 302 | Intermediate Microeconomics .............. 3 |
| ECON | $3 / 400$ | Elective ...................................... 3 |
| MGMT | 201 | Principles of Management ................ 3 |

TOTAL 21

## 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 CreditsACCTG 5103
BUSAD 502 Business Ethics and
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 becompleted:
Courses
Approved Graduate Electives ..... 6
TOTAL GRADUATE 36
In summary, the joint degree plan has the followingrequirements:
General Education ..... 36
Skills. ..... 7
Other Non-business ..... 15
Business Core. ..... 26
Business Major ..... 24
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 towards earning only the BSBA are granted credit towards the BSBA for 500-level courses taken as follows:

| 500-Level |  |
| :--- | :--- | :--- | :--- |
| Course Taken |  |$\quad$| 300- and 400-Level |
| :--- |
| Course Credit |

## JOINT BS-CIS/MBA <br> (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............................................. 3 |
| :--- | :--- | :--- |
| MGMT 585 | Management Policy \& Strategy ............... 3 |


| 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
Business and Other Electives ..... 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 Course Taken |  | 300- and 400-Level Course Credit |  |
| :---: | :---: | :---: | :---: |
| 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 |
| CIS | 532 | CIS | 432 |
| CIS | 550 | CIS | 350 |
| CIS | 581 | CIS | 481 |
| CIS | 582 | CIS | 482 |

## 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 primarily for freshmen and sophomores (lower division)

300-499 primarily for juniors and seniors (upper division)

500-599 primarily for students enrolled in master's degree programs or the equivalent.

600-699 Colorado State University (Fort Collins) courses offered at Colorado State UniversityPueblo toward a master's degree in English.

## 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


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-WID "HOUSE-NUMBE | ED" COURSES |
| :---: | :---: |
| 200, 300, 400, 500 | Workshop |
| 290, 390, 490, 590 | Special Project |
| 291, 391, 491, 591 | Special Topics |
| 292, 392, 492, 592 | Research |
| 293, 393, 493, 593 | Seminar |
| 294, 394, 494, 594 | Field Experience |
| 295, 395, 495, 595 | Independent Study |
| 296, 396, 496, 596 | Cooperative Education |
| 297, 397, 497, 597 | Studio Series |
| 298, 398, 498, 598 | Internship |
| 599 | Thesis Research |
| 600 | - Master's Degree in English (Fort Collins) |

## COURSE PREFIXES

Courses of instruction are identified by the following approved prefixes:

| ACCTG | - | Accounting |
| :---: | :---: | :---: |
| AIM | - | Automotive Industry Management |
| ANS | - | Applied Natural Science |
| ANTHR | - | Anthropology |
| ART | - | Art |
| BBE | - | Bilingual Bicultural Education |
| BIOL | - | Biology |
| BUSAD | - | Business Administration |
| CET | - | Civil Engineering Technology |
| CHEM | - | Chemistry |
| CIS | - | Computer Information Systems |
| CS | - | Chicano Studies |
| ECON | - | Economics |
| ED | - | Education |
| EE | - | Electrical Engineering |
| EN | - | Engineering |
| ENG | - | English |
| 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 |
| :--- | :--- | :--- |
| REC | - | Recreation |
| RUS | - | Russian |
| SCI | - | 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 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. (F,S)

## 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 430 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 301, 311, and 320. (*)

ACCTG 440 Governmental/Non-Profit Accounting 3(3-0) A study of advanced accounting topics especially as concerns not-for-profit entities with emphasis on governmental accounting. Prerequisite: ACCTG 202 and junior standing. (*)

ACCTG 475 International Accounting 3(3-0)
A study of the accounting issues that affect the global economy. Topics include history of international accounting and various international accounting models. Prerequisite: ACCTG 302. (*)

## ACCTG 490 Special Projects (1-6 VAR)

(*) Repeatable (6)
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 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 561 Current Issues in Auditing 3(3-0)
Current issues related to evolving auditing models - internal or external. Prerequisite: ACCTG 410 and admission to MBA or permission of MBA Director. (*)

## ACCTG 571 Current Issues in Accounting 3(3-0)

In-depth discussion of various problems in accounting Prerequisite: admission to MBA or permission of MBA Director. (*)

## ACCTG 575 International Accounting 3(3-0)

A study of the accounting issues that affect the global economy. Topics include various international accounting models, multinational tax issues, and financial analysis. Prerequisite: ACCTG 510. (*)

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. (S)
AIM 125L Automotive Suspension and Brake Systems Lab 1(0-2)
Corequisite: AIM 125. (S)
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) <br> 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, $255 / 255 \mathrm{~L}$ 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: AlM 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)

## APPLIED NATURAL SCIENCE (ANS) <br> GRADUATE COURSES

ANS 510 Scientific Information Systems 1(1-0)
Techniques of the effective and efficient use of scientific literature including the general content and organization of Chemical Abstracts, Biological Abstracts, Beilstein, Current Contents, and primary literature sources; use of computerized data bases for the location of literature and patent information. *Students in the biological and chemical sciences emphasis are strongly advised to take this course in the fall semester of their first year in the program. Prerequisite: graduate standing. (F)

ANS 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)

## ANS 588 Internship Seminar 1(1-0)

Graduate internship presentation and examination for completion of ANS degree. Prerequisite: graduate standing. (F,S,SS)
ANS 589 Thesis Defense 1(1-0)
Thesis presentation for completion of ANS degree. Prerequisite: graduate standing. (F,S,SS)

ANS 593 Seminar 1(1-0)
An interdisciplinary seminar on topics appropriate to the application of natural sciences. Prerequisite: graduate standing and ANS 510. (S)

## ANTHROPOLOGY (ANTHR) <br> 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 105 Introduction to Archaeology 3(3-0)
Evolution of culture as explained through archaeological methods and theories; emphasis on the preservation and protection of the cultural environment. (*)
ANTHR 106 (ENG 106) Language, Thought and Culture 3(3-0)
Cross-cultural introduction to language processes in human society. (*)

ANTHR 211 Laboratory and Field Techniques (1-10 VAR) Training in field and/or laboratory techniques by participation in anthropological project. Prerequisite: permission of instructor; previous work in anthropology recommended. (*)

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 251 World Archaeology 3(3-0)
Awareness and appreciation of cultural evolution and heritage through descriptions and interpretations of archaeological remains throughout the world. (*)

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 453 Southwestern Archaeology 3(3-0)

Investigations of the prehistories of diverse peoples and cultures of the Southwest. (*)

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. (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 117 Digital Media Basics 3(1-4)

This course is an introduction to digital media on the Mac. The course will introduce the student to computer graphics for print, the web, animation, and digital video. ( $\mathrm{F}, \mathrm{S}$ )

## ART 141 Drawing I 3(1-4)

Development of perception and technical skills in rendering. (F,S,SS)

## 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(0-6)

Basic problems in sculpture relating specific concerns of visual form and process. (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(0-6)
Essential skills in ceramic processes; emphasis on form and function as related to students' needs and creative intent. Prerequisite: Permission of instructor. (F,S,SS)
ART 250 Fibers and Jewelry for Educators 3(1-4)
Students will explore, understand, and be able to teach the meaning, techniques, aesthetics, visual vocabulary, and history of fibers and jewelry. Prerequisite: ART 115, 116. (*)

## ART 270 Printmaking I (1-3 VAR)

Introduction to multiple image production through traditional and non-traditional methods, including woodcut, linocut, and intaglio. Shop techniques, history and safety are also covered. ( $\mathrm{F}, \mathrm{S}^{\star}$ )
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. Prerequisite: ART 117. (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 Introduction to 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 310 Portfolio Review 1(1-0)

All art majors, after completing the art core of classes, must present a portfolio of their artwork for the art faculty to evaluate. Prerequisite: the Art core of classes. (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(0-6)
Creating sculptural elements whose form and content are a response to its site and context. Prerequisite: art core or permission of instructor. (F,S)

ART 334 Painting II 3(0-6)
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(0-6)

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)

## ART 370 Printmaking II (1-3 VAR)

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. (F,S,*)

## ART 372 Printmaking: Computers and Photo Processes

 3(0-6)Investigation into pre-press software and its application to multiple color image production. Description of photo processes and platemaking/dark-room techniques. Prerequisite: ART 370. (F,S,SS)

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. (F,S)

ART 376 Photography II 3(1-4)
Photography as an art form and an adjunct to other art media. Prerequisite: ART 276. (F,S)

## ART 381 Introduction to Graphic Design II 3(1-4)

Intermediate graphic design techniques including layout and camera-ready art work. 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. Repeatable for a maximum of nine credits. Prerequisite: permission of instructor. (F,S,SS) Repeatable (9)

## ART 410 Senior Career Orientation 1(1-0)

Formal presentation of student's academic and creative portfolio to the art faculty. Senior exhibition and artist's statement, resumes and job placement interviews. Prerequisite: senior standing. (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 212. (*)

## 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(0-6)

Advanced projects in Site Art that involve the presentation and creation of site specific sculptural forms. Prerequisite: Art core or permission of instructor. (F,S)

## ART 434 Painting III 3(0-6)

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)

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(0-6) This course explores advanced theories and techniques involved in working with clay: forming, firing, glazing, kiln design and construction. (Repeatable to 9 hours.) Prerequisite: permission of instructor. (F,S,SS) Repeatable (9)

ART 470 Printmaking III (1-3 VAR)
Advanced investigation into multiple image production through individual techniques and interest. Prerequisite: ART 270, ART 370 or permission of instructor. (*)

## 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)

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. (S)

## 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)

ART 482 Advanced Graphic Design II 3(1-4)
Further development of professional practice in the studio workshop with fully advanced participation as designers, managers, and directors. Prerequisite: ART 281, 381 and 481 or permission of instructor. (S)

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. Repeatable. 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,SS)

ART 591 Special Topics (1-3 VAR)
Prerequisite: permission of instructor and graduate standing. (F,S,SS)

## 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 2(2-0)
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 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 2(2-0)
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 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. (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. ( $\mathrm{F}, \mathrm{S}$ )

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. (F,S,SS)
BIOL 121L Environmental Conservation Lab 1(0-2)
Optional field studies to augment 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 191 College Biology I/Botany 3(3-0)
Basic cell structure and function, reproduction, and heredity. Study of structure, function, evolution, biodiversity, and ecology of plants, including fungi. Prerequisite: one year high school algebra or equivalent, and one year high school chemistry or equivalent, and one year high school biology or equivalent. Corequisite: BIOL 191L. (F,S)

BIOL 191L College Biology I/Botany Laboratory 2(0-4) Corequisite: BIOL 191. (F,S)
BIOL 192 College Biology II/Zoology 3(3-0)
Continuation of BIOL 191. Study of structure, function, evolution, biodiversity, and ecology of vertebrates and invertebrates, including protozoans. Corequisite: BIOL 192L. (F,S)

BIOL 192L College Biology II/Zoology Laboratory 2(0-4) Prerequisite: BIOL 191 and BIOL 191L. Corequisite: BIOL 192. (F,S)

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 212 Introduction of Cell Biology 2(2-0)
Cell structure and function, including reproduction, metabolism, molecular biology and cell specialization. Prerequisite: BIOL 191/191L, 192/192L, CHEM 121/121L and 122/122L. Corequisite: BIOL'212L. (F,S)

BIOL 212L Introduction to Cell Biology Lab 1(0-2)
Corequisite: BIOL 212. (F,S)
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 and Chemistry (now required); or BIOL 100/100L. Corequisite: BIOL 223L. (F)

BIOL 223L Human Physiology and Anatomy I Lab 1(0-2) Corequisite: BIOL 223. (F)

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, fluidelectrolyte balance, cardiovascular, and reproduction. Prerequisite: one year of High School Biology and Chemistry (now required); or BIOL 100/100L. Corequisite: BIOL 224L. (S)

BIOL 224L Human Physiology and Anatomy II Lab 1(0-2) Corequisite: BIOL 224. (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 191/191L, 192/192L, and 212/212L, 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 191 and BIOL 192, or permission of instructor. Corequisite: BIOL 324L. (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 191/191L, BIOL 192/192L 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 212/212L and either 301/301L 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 191/191L and 192/192L. BIOL 350 recommended. (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/E)

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 $302 / 302 \mathrm{~L}$ 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 191/191L, 192/192L, 212/212L, and CHEM 301/301L. Corequisite: BIOL 413L. (S/O)

BIOL 413L Plant Physiology Lab 2(0-4)
Prerequisite: BIOL 191/191L, 192/192L, 212/212L, 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 191/191L, 192/192L, and 212/212L, 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 212 and 212L or permission of instructor. Corequisite: BIOL 421L. (S/O)
BIOL 421L Histology Lab 2(0-4)
Corequisite: BIOL 421. (S/O)
BIOL 426 Plant Morphology 2(2-0)
Forms, basic structures, relationships, life histories and evolutionary trends of representatives of the major autotrophic plant groups. Prerequisite: BIOL 191/191L and 192/192L, or permission of instructor. Corequisite: BIOL 426L. (S/E)

BIOL 426L Plant Morphology Lab 1(0-2)
Corequisite: BIOL 426. (S/E)
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 212/212L, 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 and 351 L , 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 191/191L and 192/192L, 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 191/191L and 192/192L, 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. (F/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: $\mathrm{BIOL} 212 / \mathrm{L}$ 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 permission of instructor. (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 191/191L 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. (F)

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. (S)
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. (SS)

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 191/191L and 192/192L 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 192 or permission of instructor. Corequisite: BIOL 481L. or permission of instructor. (F/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 191/191L and 192/192L 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 191/191L and 192/192L 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 191/191L and 192/192L, or permission of instructor. Corequisite: BIOL 485L. (F)

BIOL 485L Plant Taxonomy Lab 2(0-4)
Corequisite: BIOL 485. (F)
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)

1. Measurement and control of air pollution
2. Noise and the environment
3. Industrial hygiene and accident prevention
4. Milk and food sanitation
5. Water and waste-water sanitation
6. Housing and institutional environmental health
7. Solid waste management
(S/U grading) Prerequisite: permission of department.
(F,S,SS) Repeatable

## GRADUATE COURSES

Admission to graduate courses requires approval of the adviser for the graduate program.

BIOL 502 Immunology 3(3-0)
Humoral and cell-mediated immunity including immune disorders and theories of immunological techniques. (S/E)
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 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)

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, 212/212L, and CHEM 301/301L. Corequisite: BIOL 513L. (S/O)

BIOL 513L Plant Physiology Lab 2(0-4)
Prerequisite: BIOL 191/191L, 192/192L, 212/212L, 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 212 and 212L or permission of instructor. Corequisite: BIOL 521L. (S/O)
BIOL 521L Histology Lab 2(0-4)
Corequisite: BIOL 521. (S/O)
BIOL 526 Plant Morphology 2(2-0)
Forms, basic structures, relationships, life histories and evolutionary trends of representatives of the major autotrophic plant groups. Corequisite: BIOL 526L. (S/E)
BIOL 526L Plant Morphology Lab 1(0-2)
Corequisite: BIOL 526. (S/E)
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 212/212L, 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 equivalent. (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 191/191L and CHEM 302/302L or permission of instructor. (S/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 192 or permission of instructor. Corequisite: BIOL 581L or permission of instructor. (F/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. (S/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 591 Special Topics (1-4 VAR) (F,S,SS) Repeatable
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)
(IP and S/U grading). (F,S,SS) Repeatable

## 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 160 Introduction to Computers and Information Processing 2(1-2)
Concepts and applications of computers as used by business and management. Emphasis is given to computer productivity software with hands-on exercises. (F,S)

BUSAD 161 Business Computer Applications 1(0-2)
Business computer applications for transfer students or others that do not have all software applications required in the business curriculum. Software topic tailored to student need. (F,S)

## BUSAD 255 Data Management for Decision Making 3(3-0)

 Research methods for business applications. Formulating research objectives, questionnaire design, reliability and validity. Use of variables, data, sampling methods and descriptive statistics. ( $\mathrm{F}, \mathrm{S}$ )
## 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: two years of high school math or equivalent. (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 280 Business Software and e-commerce 2(1-2)
Application of business software including project management, business planning, database, and web page development. Exploration of electronic commerce concepts and applications.
Prerequisite: BUSAD 160 or equivalent. ( $F, S$ )
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: MATH 121, and BUSAD 265 or MATH 156. (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 ( $\mathrm{S} / \mathrm{U}$ 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 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) <br> 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. (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 215 Advanced Surveying I 3(0-6)

Develops professional skills in surveying, electronic traversing, state plane coordinates, and global positioning. Prerequisite: CET 103 and MATH 124. (F)

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 Construction Cost Estimating I 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 Construction Cost Estimating II 3(3-0)
Estimating relating to heavy and highway construction. Covers heavy equipment selection, use 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 313 Architectural Drafting I 3(0-6)
Preparation of a complete set of working drawings for a modern residential building. Prerequisite: CET 115. (*)

CET 314 Architectural Drafting II 3(0-6)
Introduction to architectural design, design sketches and working drawings for a light commercial building. Prerequisite: CET 115. (*)

CET 315 Soil Mechanics Technology 3(2-2)
Basic principles of soil mechanics and foundation design as they apply to design and construction. ATSM 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 ACl 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: junior status and MATH 124. (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. (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. (S/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, PHYS 201/L, CET 208, and CET 315. (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. (CE,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 math placement at College Algebra level or higher. 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 160 L 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 211 or CHEM 301. (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. ( $\mathrm{F}, \mathrm{S}$ ) 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)

HEM 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 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 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 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 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. (F/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 560 L . (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 591 Special Topics (1-4 VAR)

Prerequisite: permission of instructor. (*) Repeatable

## CHEM 595 Independent Study (1-4 VAR) <br> (*) 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. (S/U grading). (F,S,SS) Repeatable

CHEM 599 Thesis Research (1-6 VAR)
(IP and S/U grading). (*) 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. (F)

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. (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 XML Programming 3(3-0)
eXtensible Markup Language (XML) is the new standard for information exchange. Study the emergence, current technical specification, potential business advantages and future evolution of XML. Prerequisite: CIS 311. (*)
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)
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. (S)

## 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. (S)

## 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 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)

## 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. ( $F, S, S S$ )
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. (*)

## 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 240 (WS 240) 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 246 (HIST 246) 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 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. (F,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 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 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. (*)

## CS 491 Special Topics (1-3 VAR)

Topics in Chicano Studies, identified by student/faculty interest. Prior work in Chicano Studies desirable. (*) Repeatable

## CS 493 Seminar (1-3 VAR)

Various problems within the realm of Chicano studies; in-depth, integrated approach. Prerequisite: CS 101. (S)
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)

## 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 or permission of instructor for non-business majors. (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 121 or permission of instructor for nonbusiness majors. (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, 202, and MATH 221. (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, 202, and MATH 221. (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, 202, and MATH 221. ( $\mathrm{F}, \mathrm{S}$ )

## 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, 202, and MATH 221. (*)
ECON 330 Public Finance 3(3-0)
Principles and issues of government revenue and expenditure policies. Prerequisite: ECON 201, 202, and MATH 221. (*)

ECON 402 Economics of Labor 3(3-0)
The study of labor supply and demand, impact of unions, wage determinators, distribution of income and productivity. Prerequisite: ECON 201, 202, and MATH 221. (*)

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, 202, and MATH 221. (*)

## 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, 202, and MATH 221. (*)

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 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 575 International Economics 3(3-0)
International trade and finance theory, current and past trade issues, history and impact of international economic organizations and agreements, international payments system, and international debt. Prerequisite: ECON 202 and admission to MBA. (*)
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, ART 100 and MUS 118. (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 Social Studies 3(3-0)

Methods of teaching social studies in the elementary school. Part of elementary field experience block. 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)
The scope and sequence of elementary school mathematics are examined. Instructional methods are considered in terms of both the content and the cognitive developmental rates and other individual differences of children. Prerequisite: MATH 361 and acceptance into the Teacher Education Program. ( $\mathrm{F}, \mathrm{S}$ )

## 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 2(2-0)
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. ( $\mathrm{F}, \mathrm{S}$ )

## 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 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 2(2-0)
Builds teachers' skills in leading school change. Prerequisite: admission to Graduate Program, teaching license, ED 502 and ED 503. (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 $\mathrm{K}-12$ 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 and Science 3(3-0)
Focuses on teaching methods, materials, and assessment strategies in math and science in the elementary school. Prerequisite: 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,SS)

## 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. (F,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 2(2-0)
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. (F,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 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 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 (3-6 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 3(3-0)

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 (1-2 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)
EN 103 Problem Solving for Engineers 3(2-2)
Writing computer programs to solve real-world problems in engineering and science. Prerequisite: equivalent of 2 years of high school algebra. (F)

## EN 107 Engineering Graphics 2(1-2)

Introduction to the preparation of engineering drawings using freehand sketching and computer graphics software. (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 I 3(3-0)
Introduction to energy equations and flows, entropy, kinetic theory and statistical mechanics. Prerequisite: PHYS 221. (F)

EN 322 Thermodynamics II 4(4-0)
Application of laws of thermodynamics to chemically reacting thermodynamic systems, vapor cycles, gas engine cycles, propulsion systems, refrigeration and air-water vapor mixtures. Prerequisite: EN 321. (*)

EN 324 Material Science and Engineering 3(3-0)
Material properties, deformations under force, stress-strain relationships, selection of materials. Prerequisite: EN 211. Corequisite: EN 324L. (S)

## EN 324L Material 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 3(2-2)
Linear analog control systems theory is introduced. Open and closed-loop systems are examined, and performance characteristics are analyzed. Prerequisite: EN 260, MATH 337. (S)

## EN 361 Digital Electronics 4(3-2)

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. (F)

## EN 362 Introduction to Mechatronics 3(2-2)

Elements of a mechatronics system: signal conditioning, sensors, actuators, microcontrollers, and software. Prerequisite: EN 263. (F)

## EN 363 Virtual Machine Design 3(2-2)

Computer aided design of machines including mechanical components: shaft systems, power transmission, and motion generation. Prerequisite: EN 324, EN 362. (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 421 Structural Analysis 3(3-0)
Analysis if indeterminate beams, frames and trusses by methods of moment of distribution, slope deflection, real work, virtual work and least work. Prerequisite: EN 324. (*)

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. (S)

EN 441 Engineering of Manufacturing Processes 4(3-2)
Materials and processes for manufacturing including machining, casting, and forming processes: design, modeling and control. Prerequisite: EN 212. (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 3(2-2)
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. (F)

EN 461 Engineering Hydraulics 3(3-0)
Steady and unsteady flow in pipes, open-channel flow, hydraulic measurements, critical depth and hydraulic jump, and design of spillways. Prerequisite: EN 301 or permission of instructor. (*)

## EN 462 Industrial Robotics 3(2-2)

Basic robotics principles; robot interfacing; robot controls and programming. Laboratory exercises use various robots to meet specific industrial tasks. Prerequisite: EN 460, EN 473. (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 3(2-2)

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. (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 487 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 488 Engineering Design Projects 3(3-0)

Application of engineering principles to a design project. Prerequisite: EN 493. (F,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 493 Senior Seminar 2(2-0)
Steps in the engineering design process including creativity, technical analysis, and presentations. Prepare for senior project. Prerequisite: senior standing and permission of instructor. (S/U grading) (F,S)

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 500 Logistics, Maintainability and Life-cycle Support

 3(3-0)Application of management systems analysis to problems of system maintainability and maintenance. Models of repair and failure, wear-out processes, maintenance and inspection policies and spare parts policies. Prerequisite: graduate standing. (*)
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: graduate standing. (F)

## EN 504 Scheduling and Sequencing 3(3-0)

Theory of determining 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 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 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 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 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) ( $\mathrm{F}, \mathrm{S}$ )

## 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 Adv. Comp., Rhetoric, and Grammar 3(3-0)
Advanced persuasive writing, including rhetoric and grammar. Prerequisite: ENG 102. (*)
ENG 304 Advanced Composition and Rhetoric 3(3-0) Acquaints students with a range of classical and contemporary strategies 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 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 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 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 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 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 453 African American English 3(3-0)
Origin, development, linguistic characteristics, and cultural importance of African American English. Issues related to the use of AAE in education and elsewhere. Prerequisite: ENG 102. (*)

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 focused on writing and student achievement; designed for educators by the Southern Colorado Writing Project. No workshop subtitle may be repeated for credit. Prerequisite: graduate standing. (F,S,SS)

ENG 511 Seminar: American Literature 3(3-0)
In-depth analysis of specific topics, themes, authors, and works. Prerequisite: graduate standing. (*)

ENG 512 Literature for Adolescents 2(2-0)
Literature suitable for adolescents, including classical and contemporary authors as well as issues in selection and evaluation. Prerequisite: graduate standing. (*)

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 (1-3 VAR)
Prerequisite: graduate standing (*) Repeatable
ENG 595 Independent Study (1-3 VAR)
Directed, intensive study and guidance for studying major literary figures or movements; arranged with the chair of the department. Prerequisite: graduate standing. (*) Repeatable

## 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 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)
Snowboarding, telemarking, cross country skiing and snow shoeing will be examined. Equipment, clothing, trip planning will be reviewed. Students will participate in snow sporting trips. (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 107L Scuba Diving 1(0-2)
Students will learn the basic skills, knowledge and equipment necessary to receive beginning scuba certification. The class includes an off-campus checkout dive for certification purposes. (*)

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. (F,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. (F)

EXHP 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. (*)

EXHP 114L Basic Mountaineering Techniques 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. (*)

## EXHP 115L Skiing 1(0-2)

Fundamentals, techniques, equipment and clothing for alpine and Nordic skiing will be examined. Trips will be available to experience alpine/Nordic skiing. Additional costs apply. (*)

EXHP 116L Camping 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)

EXHP 117L Backpacking 1(0-2)
Students will experience climbing one or more mountains in the state of Colorado. Clothing, travel techniques, food, route finding and time management are just some of the topics explored in this course. (F)

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 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 1(0-2)
Certification course in the American Red Cross Life Guarding program designed to provide lifeguard candidates and lifeguards with the skills and knowledge necessary to keep patrons of aquatic facilities safe in and around the water. 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. ( $\mathrm{F}, \mathrm{S}, \mathrm{SS}$ )

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. (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)

EXHP 231 Cardiopulmonary Resuscitation 1(1-0)
Technique of applying a combination of artificial respiration and artificial circulation in the event cardiac arrest occurs. (S/U grading) (*)
EXHP 232 First Aid (2-3 VAR)
Knowledge and skills in current first-aid and CPR procedures. Red Cross certification. Students in the Athletic Training track are required to enroll for 3 credits. (F,S,SS)

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 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)

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 279 Practicum in Athletic Training I 2(0-4)
Instruction, practice and evaluation of assigned NATA psychomotor competencies and clinical proficiencies. Prerequisite: EXHP 232, EXHP 260, and completion of 35 clinical observation hours within the athletic training environment. ( $\mathrm{F}, \mathrm{S}$ )

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 311 Commitment to Personal Development 1(1-0)
Life skills class offered for Junior Student-Athletes to enhance their commitment to Personal Development encouraging emotional well-being, personal growth and decision making. (F)
EXHP 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)

EXHP 330 Lower Extremity Evaluation 3(2-2)
An in-depth study of assessment techniques and protocols applicable to injuries to the lower extremities. Prerequisite: EXHP 260, BIOL 223, 223L and approval by program director. (F)

EXHP 331 Upper Extremity Evaluation 3(2-2)
An in-depth study of assessment techniques and protocols applicable to injuries to the upper extremities. Prerequisite: BIOL 223, 223L and approval of the program director. (S)

## EXHP 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: EXHP 331 and permission of the instructor. (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 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: EXHP 332. (S)

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 109 or 121 or permission of instructor. (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 109 or 121, EXHP 343. (F)

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 or 109, EXHP 343. (F)

## EXHP 345 Methods of Physical Activities \& Games I

 2(2-0)Teaching procedures, skills and techniques of physical activities and games including soccer and volleyball. (F)

## EXHP 346 Methods Physical Activities \& Games II

 2(2-0)Teaching skills, procedures and techniques of physical activities, fitness and games including track/field, basketball and softball. Prerequisite: EXHP 345. (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 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. (S)

EXHP 379 Practicum in Athletic Training II 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: EXHP 279 and CPR certification. (F)

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 389 Practicum in Athletic Training III 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: EXHP 379 and CPR certification. (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 411 Commitment to Career Development 1(1-0)
Life skills class required for Senior Student-Athletes to prepare them for post graduation. Encourages the student to develop and pursue career and life goals. (S).

EXHP 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). Corequisite: one of the following courses: EXHP 279, 379, 389, 479, 489. (F,S,SS) Repeatable
EXHP 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 EXHP 330, 331. (F)

## EXHP 431 Therapeutic Exercise 3(2-2)

Study of current rehabilitation theories and application in the athletic training setting. Prerequisite: EXHP 430. (S)

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 \& Leadership 3(3-0)
Methods used to assess exercise clients, prescribe effective exercise programs, and develop/lead group exercise classes in order to achieve optimal health in apparently healthy people. Prerequisite: EXHP 344, 344L. (S)

EXHP 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)

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 and Officiating 3(3-0)
Skills and methods of coaching and officiating sports. (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 473 Coaching Certification Clinic 1(1-0)
Overview of principles of coaching, scientific basis of coaching, management and legal issues in coaching, and sports first-aid. Required for American Sports Education Program coaching certification. (SS)

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 479 Practicum in Athletic Training IV 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: EXHP 389, current CPR certification. (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 489 Practicum in Athletic Training V 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: EXHP 479. (S)

## EXHP 491 Special Topics (1-5 VAR)

Permission of instructor. (*) Repeatable

## EXHP 494 Field Experience (1-5 VAR)

Learning experience to be conducted in the actual environment and supervised by the physical education program. (S/U grading) Prerequisite: approval of the department chair. (*) Repeatable
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 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. (S/O)

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. (*)

## 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 and ECON 202. (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 and MATH 221. (*)

FIN 333 Investment Analysis 3(3-0)
Analysis and forecasting of security markets, industry and company studies, portfolio selection and management. Prerequisite FIN 330 and MATH 221. (*)
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 and MATH 221. (*)

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 and MATH 221. (*)

## 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 and MATH 221. (*)
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, FIN 330, and MATH 221. (*)

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 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 270 Foreign Language Field Trip (2-6 VAR)

Communication, lectures by writers, artists, political leaders and specialists. Visits to museums, attendance at movies, theatre and excursions. Prerequisite: permission of instructor. (*) Repeatable
FL 291 Special Topics (1-3 VAR) (F,S) Repeatable
FL 370 Foreign Language Field Trip (2-6 VAR)
Communication, lectures by writers, artists, political leaders and specialists. Visits to museums, attendance at movies, theater and excursions. 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. Prerequisite: two years of college study in the language of the country or countries visited and 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 COURSE

FL 591 Special Topics (1-3 VAR) (*) Repeatable

## FRENCH (FRN)

## UNDERGRADUATE COURSES

FRN 101 Beginning Spoken French I 3(3-0)
Development of skills in speaking, listening, reading, writing, and cultural understanding. (F,S)

FRN 102 Beginning Spoken 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 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. (F)

FRN 387 Intensive French Study Abroad (6-12 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 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: 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,SS)

## 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 Spoken German I 3(3-0)
Development of skills in speaking, listening, reading, writing, and cultural understanding. (F,S)

## GER 102 Beginning Spoken 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. (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. (*)
HIST 201 U.S. History I 3(3-0)
United States history from founding of North American colonies to 1877 Reconstruction era. (*)

HIST 202 U.S. History II 3(3-0)
United States from 1877 Reconstruction era to contemporary era. (*)

## HIST 211 Colorado History 3(3-0)

History, government and economic factors important to the settlement and development of Colorado. (S)

HIST 246 (CS 246) 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 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 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. (S,O)

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. (F,E)

## 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 444 The Lincoln Brigades: American Involvement in the Spanish Civil War 3(3-0)
American involvement in the Spanish Civil War was mainly a volunteer effort. The class investigates those who fought for the Spanish Republic. 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)

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)

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)
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. (S/E)

## 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. (*)
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 Historical Studies 3(3-0)

A rotating series of topic courses on American, European and World History with an emphasis on understanding scholarship pertaining to these subjects. Prerequisite: graduate standing or instructor's permission. (*) Repeatable

## HIST 502 Museum Management 3(3-0)

Examination of topics and issues in public history designed for current and potential museum professionals. Prerequisite: graduate standing or instructor's permission. (*)

HIST 503 Archival Administration 3(3-0)
Examination of topics and issues in public history designed for current and potential archival professionals. Prerequisite: graduate standing or instructor's permission. (*)

HIST 504 Historic Preservation 3(3-0)
Examination of topics and issues in historic preservation designed for current and potential preservation professionals. Prerequisite: graduate standing or instructor's permission. (*)

HIST 505 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 509 Seminar in Public History 3(3-0)
This course will explore the development of public history, archives management and historic preservation as well as explore methodologies and employment opportunities in these fields. (*)

## HIST 510 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 S/U grading) (*) Repeatable

## HIST 591 Special Topics (1-3 VAR) (*)

HIST 592 Research 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 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 193 Introduction to Honors 1(1-0)
The purpose of this course is to introduce honors students to the Honors Program. Additionally, there is emphasis on developing effective and efficient study habits based on established learning principles. Prerequisite: director's permission. (F)
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 490 Special Projects 2(2-0)

Prerequisite: three hours of previous honors work. (*)
HONOR 491 Special Topics (1-3 VAR)
(*) Repeatable (12)
HONOR 493 Honors Senior Seminar 3(3-0)
A thematic, interdisciplinary, small-group seminar dealing with scientific, technological, sociological, cultural, aesthetic, ethical, and historical aspects of issues of education and research. Guest speakers and visits to museums, exhibits and cultural events related to the course's theme. Senior honors project will be introduced. Prerequisite: Three hours previous honors work. (*)

## ITALIAN (ITL) <br> UNDERGRADUATE COURSES

ITL 101 Introduction to Italian I 3(3-0)
Development of skills in speaking, listening, reading, writing, and cultural understanding. (F,S)
ITL 102 Beginning Spoken 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 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 (6-12 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 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: 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

A grade of $C$ or better is required for prerequisite courses.
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 and one year of high school algebra. (F,S,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, and counting techniques. Prerequisite: Satisfactory placement exam score and MATH 099 or one year of high school algebra 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 and MATH 099 or two years of high school algebra 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. (*)

## 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 and two years of high school algebra or equivalent. (F,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 and MATH 124 or equivalent. (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 and MATH 099 or one year of high school algebra or equivalent. (F,S,SS)

MATH 207 Matrix and Vector Algebra with Applications 2(2-0)
Systems of equations, matrix representation of systems, solution of systems, inverses, determinants, and Cramer's Rule. Vectors, scalar and cross-products, applications to twoand three- dimensional geometry. Prerequisite: MATH 124 or equivalent. Corequisite: Majors and minors should take this course concurrently with MATH 224 or MATH 325. (F,S)

## MATH 209 Symmetry 3(3-0)

Liberal arts course exploring the mathematical world of symmetry. Topics include isometrics, Euclidean geometry, tiling theory, group theory, and fractals. Prerequisite: Satisfactory placement exam score. One year of high school geometry or permission of instructor. (*)

MATH 220 Quantitative Analysis for Business 4(4-0)
An introduction to quantitative methods required for business studies, includes a brief introduction to the Calculus. Prerequisite: Satisfactory placement exam score and MATH 121 or equivalent. (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 and MATH 121 or equivalent. ( $\mathrm{F}, \mathrm{S}$ )
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. Corequisite: Majors and minors should take this course concurrently with MATH 207. (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 124 required 207 recommended. (S)

## MATH 256 Probability for Engineers and Scientists

 3(3-0)A calculus-based introduction to applied probability and stochastic processes. An intuitive study of random variables, special distributions, expectations, and limit theorems. Prerequisite: MATH 224 or permission of instructor. (S)

## MATH 291 Special Topics (1-3 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. (F,S)

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. Corequisite: Majors and minors who have not yet completed MATH 207 must enroll in MATH 207 concurrently with MATH 325. (F)

MATH 327 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. (S)

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. (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. (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: recommend MATH 325. (*)

## 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. (*)

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, MATH 224 and CIS 253. (*)

MATH 348 Numerical Methods 3(3-0)
Linear and non-linear systems of equations, systems of differential equations and boundary value problems, rational function approximations. Prerequisite: MATH 307 and a programming language. (*)

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. (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. (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. (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. ( ${ }^{*}$ )

## MATH 419 Number Theory 3(3-0)

Divisibility, prime numbers, linear congruences, multiplicative functions, cryptology, primitive roots, and quadratic residues. Prerequisite: MATH 307 or MATH 320. (*)

## MATH 421 Advanced Calculus I 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. (F)

## MATH 422 Advanced Calculus II 3(3-0)

Additional topics from elementary real analysis, theory of multivariable calculus, Stieltjes and line integrals. Prerequisite MATH 421. (*)

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. (*)

## 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. (*)

MATH 456 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. (*)

## 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. (F/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. (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. (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. ( $\mathrm{F}, \mathrm{S}$ ) 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 541 Computers 3(3-0)
The use of the computer in mathematical investigations, including sophisticated comprehensive computer programs ${ }_{\left({ }^{*}\right)}$ such as Mathematica. Prerequisite: permission of instructor. (*)

## MATH 544 Mathematical Methods of Applied Science

 3(3-0)Topics in applied mathematics, including deterministic and stochastic models, programming, optimization, networks, and simulation. Prerequisite: permission of instructor. (F)
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. (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 560 Concepts in Elementary School Mathematics (1-3 VAR)

Problems of the curriculum, methods of teaching and evaluation in the elementary school. Prerequisite: permission of instructor. (SS)

MATH 570 Geometry for Middle School Teachers 3(3-0)
Learning geometry through discovery, using technology and projects. Concepts include measurement in 2-D and 3-D, symmetry, packing, applications, and reasoning. Prerequisite: graduate standing and MATH 124 or permission of instructor. (SS)
MATH 571 Problem-Solving for Middle School Teachers (1-2 VAR)
The course is designed to focus on the process of mathematical problem solving. Students will develop useful heuristics and reflect on problem-solving strategies. Repeatable once for a total of three (3) credits. Prerequisite: graduate standing and MATH 124 or permission of instructor. Upon repeat enrollment completion of Fall offering required before Spring enrollment. (F,S) Repeatable (3)

## MATH 576 Probability and Statistics for Middle School

 Teachers 3(3-0)Elementary probability and statistics topics relevant to the middle school mathematics curriculum. Emphasis on exploratory activities and on modeling best teaching practices. Prerequisite: graduate standing and MATH 124 or 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. ( $\mathrm{S} / \mathrm{U}$ 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) <br> UNDERGRADUATE COURSES

MCCNM 101 Media and Society 3(3-0)
Survey course that examines mass media within the context of cultural impact, regulation, economic status, and technological innovation. (F,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. (*)

## MCCNM 201 Introduction to Journalism 3(3-0)

Instruction and practice in basic news writing including the public's right to know, newsworthiness, and writing style. Required of all majors and minors. Word processing skills required. 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 Desktop Publishing 3(1-4)
To develop computer publishing and design skills with varied software packages and within PC and Mac environments, preparing students for publication design and editing careers. Prerequisite: word processing literacy. (F,S,SS) Fee required.

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: BUSAD 160, MCCNM 101, or permission of instructor. (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. (F,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. (S)

MCCNM 245 Digital Audio and Video 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 Video 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. (F,S,SS) 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 Photography 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 265 History of Journalism 3(3-0)
History of the press in America from colonial times to the present day; political and economic impact of newspapers and magazines during the 19th and 20th centuries. (*)

## 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. (S)

## 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. (S)

MCCNM 304 Feature Writing 3(3-0)
Reporting campus events via interpretive articles, news features, straight features, seasonal 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 Graphics and 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. (S)

## 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 319 Direct Advertising 3(3-0)
An advanced course stressing the philosophy, objectives, content and development of direct response advertising, particularly direct mail and computer-generated messages. Prerequisite: MCCNM 210. (*)
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, 220, and 245. (F,S)

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 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 and 232. (F)

MCCNM 338 Global Communications 3(3-0)
The student will explore the technological concepts underlying modern global communications systems and the role that those technologies and systems play in our global community. Prerequisite: New Media Tract or permission of instructor. (*)

MCCNM 350 Advanced Media Lab (1-3 VAR)
An advanced laboratory course for students involved in University publications and campus broadcast operations. May be repeated for up to 8 credits. Prerequisite: junior or senior standing; permission of instructor. (F,S,SS) Repeatable (8)

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. (*)

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: MCCNM 201 and 304. (*)

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. ( $\mathrm{F}, \mathrm{S}$ )
MCCNM 494 Field Experience (3-10 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 8 hours. Prerequisite: junior or senior standing, minimum of 30 hours in major, or permission of program chair, 3.0 major GPA. (F,S,SS) Repeatable (8)
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 349 Management of Service Businesses 3(3-0)
Management of service organizations, with emphasis on the health delivery, tourism, resort, and hospitality industries. Prerequisite: MGMT 201 or permission of instructor for nonbusiness majors 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. Pre-requisite: 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 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 484 Senior Studies 3(3-0)
A discipline-oriented integration of prior course work into a special project, research paper and/or activity that demonstrates proficiency in the major. Pre-requisites: senior standing in the School of Business and completion of all core courses. (*)
MGMT 485 Management Policy and Strategy 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 all foundation and fundamentals courses. (*)

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 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 523 Management of Non-Profit Organizations

 3(3-0)Examines differences among public, charitable, and private organizations regarding their external environments, goals, strategies, administrative procedures, operations, and human resource management. 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 343 Personal Selling 3(3-0)
persuasive personal communications in selling consumer and industrial products and services. 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 349 Marketing Service Businesses 3(3-0)
Marketing of service organizations, with emphasis on the health delivery, tourism, resort, and hospitality industries. Prerequisite: MKTG 340 or permission of instructor for nonbusiness majors. (*)

## 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, 440, second semester seniors. (*)

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)

(*) Repeatable (6)
MKTG 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable (6)

MKTG 495 Independent Study (1-3 VAR)
Prerequisite: senior standing in School of Business and permission of department chair. (*) 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: 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 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 541 Strategic Marketing 3(3-0)
A thorough analysis of decision making in strategic marketing, in product and service industries, profit and non-profit institutions, using case analysis and readings. Prerequisite: admission to MBA or permission of MBA Director. (F)

## 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 3(3-0)

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 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 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 Vocal Ensemble I 1(0-2.5)
Level one secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal ensemble 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 1(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 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 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 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 136 Guitar Ensemble, Jazz I 1(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 String Orchestra I $\mathbf{1}(0-2.5)$
Rehearsal, study, and public performance of selected appropriate literature for the string orchestra. Additional rehearsals and activities are required. (Level I). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 150 Music Theory I 3(3-0)
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 1(0-2)
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 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 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 Vocal Ensemble II 1(0-2.5)
Level two secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal ensemble literature. Additional rehearsals and performance activities required. Prerequisite: permission of instructor. (F,S) Repeatable (2)

## MUS 210 Music Theory II 3(3-0)

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 1(0-2)
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 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 230 Marching Band (0-8)
Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators. (F) Repeatable (2)
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 (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. (F,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 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. ( $\mathrm{F}, \mathrm{S}$ )

MUS 244 String Orchestra II 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the string orchestra. Additional rehearsals and activities are required. (Level II). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 250 Music Theory III 3(3-0)
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 1(0-2)

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 3(3-0)
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 1(0-2)
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 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 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 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 Vocal Ensemble III 1(0-2.5)

Level three secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal ensemble 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 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 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. (F,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 Elementary Music Methods 3(3-0)
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of elementary music in the public schools. Prerequisite: admission to Teacher Education Program. (F/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. $(\mathrm{F}, \mathrm{S})$ Repeatable (2)

## MUS 344 String Orchestra III 1(0-2.5)

Rehearsal, study, and public performance of selected appropriate literature for the string 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 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 Vocal Ensemble IV 1(0-2.5)

Level four secondary music ensemble specializing in the rehearsal, study, and public performance of appropriate vocal ensemble 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 420 Counterpoint 3(3-0)
A re-creative course in 16th-, 18th-, or 20th-century contrapuntal styles. Composing music in two, three and four voices as appropriate to the particular period. Prerequisite: successful completion of MUS 150, 210, 250, 280. (*)

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 $1(0-8)$

Provides functional music at home football games and select special occasions while serving as a laboratory of learning for future music educators. (F) Repeatable (3)

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 Secondary Music Methods 3(3-0)
Comprehensive study in materials, techniques, methods, and problem-solving techniques for the teacher of choral/instrumental music in the public schools. Prerequisite: successful completion of MUS 113, 223, 233, 243, 253, admission to Teacher Education Program. (S/O)

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 String Orchestra IV 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the string 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 (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)-(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 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 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: graduate standing. (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 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 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 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 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)
Introduction to the basic disease processes of individual body systems. Incorporates nursing assessment/diagnosis with associated intersystem diseases. Prerequisite: BIOL 223/L, BIOL 224/L or by permission. (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)
Provides a bridge for healthcare professionals and students to understand historical, philosophical, and theoretical concepts used in healthcare, professional practice, human needs and nursing process. 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)
Utilization of the nursing process in meeting primary health needs of individuals. Basic nursing interventions, critical thinking and therapeutic communication are emphasized. Prerequisite: admission into Nursing Program. Prerequisite: all nursing prerequisite and general education courses. Corequisite: NSG 232L. (S,SS)

NSG 232L Fundamentals of Nursing Care Lab 4(0-8)
Application of NSG 232. Laboratory practice assists students in developing fundamental competencies for providing basic nursing care to individual clients. Corequisite: NSG 232. (S/U grading) (S,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)
Systematic assessment and analysis of individuals needs using the nursing process to develop a plan of care, to educate, and to promote health and wellbeing. 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) Provides the skills to complete a comprehensive assessment, for educating and promoting health and wellbeing using the nursing process, evidenced based practice and diagnostic reasoning. 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)
Selected theories which influence ethical choice in nursing are presented. Areas of the law and legal systems that affect the public health are included. Current ethical issues related to nursing practice. Prerequisite: permission of instructor. (*)

NSG 307 Health and Disease Systems 3(3-0)
Alterations and adaptations of individual body systems to disease processes. Prerequisite: BIOL 223/L, BIOL 224/L or by permission. (F,S)

NSG 308 Pharmacology in Nursing Practice 3(3-0)
Pharmacokinetics, dynamics, therapeutics as well as drug administration and interaction, safety and legal implications are discussed. 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)

Introduction to the philosophy of the Nursing program, and the professional nursing practice theories. Teaching learning theories are examined in relation to nursing practice. Prerequisite: Registered Nurse License. ENG 101, ENG 102, Foreign Language, SPCOM 103, PSYCH 151 or by permission. (SS,F)

## NSG 311 Concepts for Professional Nursing 4(4-0)

Advanced study of concepts and theory of Maternal, neonatal, pediatric, family and mental health related to professional nursing. An experiential component will be included. Prerequisite: Registered Nurse License. (SS,S)

## NSG 312 Caring for Childbearing Family 3(3-0)

Nursing care of the neonate and procreative family during the peri-natal period. Includes health promotion, family theory 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. Clinical experiences emphasize use of the nursing process in meeting needs of the neonate and family during the peri-natal period. Corequisite: NSG 312. ( $\mathrm{S} / \mathrm{U}$ grading) ( $\mathrm{F}, \mathrm{S}$ )

NSG 322 Caring for Adults I 4(4-0)
Nursing process directed toward principles of therapeutic nursing care of adult health promotion and with common health problems. 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. Clinical experiences emphasize use of the nursing process in meeting selected needs of adult clients. Corequisite: NSG 322. (S/U grading) (F,S)

NSG 331 Healthy Aging 2(2-0)
Theory for nursing care of older adults. The promotion of healthy aging through utilization of the nursing process is emphasized. 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)
Nursing care of children and adolescents. Emphasizes the nursing process related to health promotion, maintenance and restoration for the child, adolescent and family. 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. Clinical experiences emphasize use of the nursing process in meeting health related needs of children and adolescents. Corequisite: NSG 332. (S/U grading) (F,S)

NSG 351 Evidence Based Nursing Practice 3(3-0)
An introduction to the roles, and methods of research in nursing. Facilitates development of nurses as consumers of research for research based practice. Prerequisite: MATH 156 , completion of all required 200 level nursing courses. (S,SS)

## NSG 371 Healthcare Informatics 2(2-0)

The course includes internet use by health care consumers, policy, current and future role of telehealth. Covers informatics, current issues and challenges facing nursing. Pre or corequisite: NSG 231, 232 or by permission. (S,SS)

## NSG 372 Clinical Practicum I 3(0-9)

An elective course that provides an opportunity for a concentrated clinical practicum in a variety of patient care settings. Prerequisite: completion of all 300 level nursing courses. ( $\mathrm{S} / \mathrm{U}$ grading) (SS/*) Repeatable (6)

NSG 382 Dynamics of Behavioral Health 3(3-0)
Nursing process directed toward care of individuals and families experiencing mental illness. Includes concepts of mental health, group process and group leadership. 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. Clinical experiences emphasize all components of the nursing process in meeting the needs of individuals and families experiencing mental illness. Corequisite: NSG 382. (S/U grading) (F,S)

NSG 391 Special Topics (1-5 VAR)
Prerequisite: permission of instructor. (*) Repeatable

## NSG 420 Caring for Adults II 4(4-0)

Builds on content in NSG 322. Includes complex, acute and chronic health problems of individuals and continuity of care within the health care system. 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 420. Students utilize expanded data base and action strategies to meet complex health needs of individuals. Includes technological skills for nursing interventions. Prerequisite: completion of all required 300 level nursing courses. Corequisite: NSG 420. (S/U grading) (F,S)

NSG 442 Global Public Health 3(3-0)
Theory in application of the nursing process, public health principles and concepts related to communities. 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. Selected experiences 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)
Analyze and apply management \& leadership theories used in healthcare. Explore issues and trends related to the healthcare including ethical and legal issues. Prerequisite: completion of NSG 420 and NSG 442. Corequisite: NSG 452 or by permission. (S,SS)

## NSG 452 Comprehensive Nursing Practice 4(4-0)

Synthesis of previous course work with integration of theories, research and the nursing process in meeting complex health needs of clients from diverse cultural backgrounds. Prerequisite: NSG 420/420L, 442/442L. Corequisite: 452L. (S,SS)

NSG 452L Comprehensive Nursing Practice Lab 5(0-10) Application of NSG 452. Synthesis of process and content of nursing in managing client groups and aggregates. Corequisite: NSG 452. (S/U grading) (S,SS)

## NSG 472 Clinical Practicum II 3(0-9)

Concentrated practicum consisting of application of the nursing process in complex care settings. 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)
Major nursing theories are examined in relation to nursing functions they imply, kinds of hypotheses they would generate, and kinds of research they would stimulate. There is examination of research process, design, methods of collecting and analyzing data, and interpretation of data. Prerequisite: NSG 351. ( ${ }^{\text {( }}$ )

NSG 495 Independent Study (1-6 VAR) (*) Repeatable

## GRADUATE COURSES

NSG 506 Roles, Policy \& Issues 3(2.5-2)
Exploring advanced practice roles, the potential impact, trends, issues and benefits to the public and the effect of policy and politics. Observation hours required. Prerequisite: admission to Graduate Nursing Program or by permission. (S)

## NSG 508 Advanced Practice Theory 3(3-0)

Examines the theoretical basis of nursing which guides advanced nursing practice. Theories are evaluated for their applicability to practice, research, education, and administration. Prerequisite: admission to Graduate Nursing Program or by permission. (S)

## 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 and Well Being 3(2-4)
Health and psychological wellbeing of clients in the context of primary, secondary and tertiary prevention in advanced practice. Clinical hours required. Prerequisite: graduate nursing core courses. (SS)

NSG 552 Advanced Pathophysiology 3(3-0)
Comprehensive scientific background and understanding of pathophysiology as it relates to client's needs and assessment across the lifespan. Prerequisite: admission to Graduate Nursing Program or by permission. (F)
NSG 561 Advanced Pharmacology 3(3-0)
Prepares the advanced clinical practitioner for drug therapy management in the diagnosis and treatment of clients across the lifespan. Prerequisite: admission to Graduate Nursing Program or by permission. (F)
NSG 562 Advanced Assessment 3(2-4)
Data collection, organization, recording, physical and psychosocial assessment and communication of data reflecting the health status of the client. Clinical hours required ( 60 hrs ). Prerequisite: admission to Graduate Nursing Program or by permission. (F)

## NSG 571 Healthcare Informatics 3(3-0)

The course includes internet use by health care consumers, policy, current and future role of telehealth. Covers informatics, current issues and challenges facing nursing. Prerequisite: admission to the Graduate Nursing Program or by permission. (S,SS)

## NSG 575 Curriculum Development 2(2-0)

Historical foundations, theories and conceptual frameworks and processes for curriculum development are explored for all levels of nursing programs and continuing nursing education programs. Prerequisite: admission to Masters Program or by permission. (SS)

## NSG 576 Teaching \& Instruction in Nursing 4(4-0)

Teaching methods, evaluation tools, and the complexities of the educator role are explored in seminar discussions. Prerequisite: admission to Masters Program or by permission. (SS)
NSG 581 Synthesis: Psych Mental Health NSG I 8(4-16) 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. (S)

NSG 582 Synthesis: Psych Mental Health NSG II 8(4-16) Synthesizes theory into practice, based on psychiatric mental health advanced practice nurse's competencies and clinical requirements. Prerequisite: NSG 581. (SS)

## NSG 583 Synthesis Experience: Educator 9(3-24)

Synthesizes theory into practice, based on the nurse educator competencies and advance practice clinical requirements. Prerequisite: completion of all core courses, NSG 551. Two years (4000 hours) RN clinical practice. (*)

NSG 584 Synthesis Experience: Family 9(3-24)
Synthesis theory into practice, based on the family nurse practitioner competencies and advanced practice clinical requirements. Prerequisite: completion of all core courses, NSG 588. Two years ( 4000 hours) RN clinical practice in acute care within the last five years. (*)

NSG 585 Acute/Chronic/Emergent Health Needs I 8(4-16) Practitioner's role in the diagnosis and management of client's needs in fluid-electrolytes, cardiovascular-respiratory, nephrology-dialysis, transplants, GI/GU, endocrinology, nutrition, and genetics ( 240 clinical hours). Prerequisite: completion of all core graduate nursing courses and two years (4000 hours) RN acute clinical practice within last five years. (S)

## NSG 586 Acute/Chronic/Emergent Health Needs II

 8(4-16)Role of the practitioner in the diagnosis and management of client's needs for neuro-trauma, oto-ophthalmology, oncology, women/men's health, orthopedics, immunology, palliation, gerontology ( 240 clinical hours). Prerequisite: completion of all core graduate nursing courses and two years ( 4000 hours) RN acute care clinical practice within last five years. (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 Management of Pediatric Clients 4(2-8)

Role of the practitioner in the management of minor acute and chronic problems of infants, children, and adolescents (120 clinical hours). Prerequisite: NSG 585. (S)

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/Project Seminar 3(3-0)
Developing skills in creating and writing research-based proposals or protocols and in using research methods to evaluate nursing care. Prerequisite: NSG 592. (S/U grading) (F,S,SS)

## 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

## PHILOSOPHY (PHIL) <br> 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 103 Civilization 1(1-0)
Kenneth Clark's acclaimed film series "Civilization." Thirteen 50 -minute films exploring the concept of civilization from the primary viewpoint of the arts and philosophy. (*)
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 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 293 History of Philosophy Seminar I 3(3-0)
Greek, Latin, and medieval philosophy. (*)
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 393 History of Philosophy Seminar II 3(3-0)
Early modern period (Renaissance) in Western philosophy from Hobbes to Hume. Emphasis on the continental rationalists and the British empiricists. (*)
PHIL 401 Epistemology Seminar 3(3-0)
Study of the philosophical principles and issues relevant to various claims of knowledge. Prerequisite: PHIL 205, 313 and 314. (*)

## PHIL 402 Metaphysics Seminar 3(3-0)

Ontology, cosmology, space, time, causality, change, freedom, and other topics of metaphysics. Prerequisite: PHIL 313 and 314. (*)

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 493 History of Philosophy Seminar III 3(3-0)
Later modern period in philosophy beginning with Kant and continuing to the beginning of the 20th century. (*)

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. Corequisite: PHYS 202L. (F,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. 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. 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. (F/E)

PHYS 321 Thermodynamics 3(3-0)
Introduction to thermodynamic laws and principles, entropy, kinetic theory and statistical mechanics. Prerequisite: PHYS 221. (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. (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. 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. (F, 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. (F, O)

PHYS 361 Physics of Sound 3(3-0)
Sound waves, sources of sound, physics of hearing, acoustical measurements. For speech correction majors and other interested students. Prerequisite: MATH 120 or equivalent. ( $\mathrm{F}, \mathrm{O}$ )

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. (S, E)

PHYS 432 Advanced Laboratory-Electricity and 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. (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. (S, 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 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 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. (F)

## POLSC 202 World Politics 3(3-0)

Study of political problems and issues which face the world. Emphasis on conflict, arms transfers, economic change and world commons. (S)

POLSC 240 Political Analysis 3(3-0)
An introduction to political science and its subfields. Includes methods for critically thinking about the political process and communicating political ideas. Prerequisite: POLSC 101. (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 and 240. ( ${ }^{*}$ )

## POLSC 260 Paralegal I 3(3-0)

Study of theory of law and legal process. Course will not count toward the major or minor in political science. (F,S,SS,*)

POLSC 261 Paralegal II 3(3-0)
Using primary and secondary source materials in legal research. Course will not count toward the major or minor in political science. Prerequisite: POLSC 260. (F,S,SS, *)

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. (F)

POLSC 320 Constitutional Legal Research 3(3-0)
Use of legal research methods to analyze the Constitution and its impact on statues and judicial decisions. (*)

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 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 Area Study: Europe 3(3-0)
Introduction to the political, economic and military structures and processes of the region. (*)

POLSC 445 Area Study: Latin America 3(3-0)
Introduction to the political, economic, and military structures and processes of the region. (*)
POLSC 450 Area Studies: Asia and The Pacific 3(3-0) Introduction to the political, economic and military structures and processes of the region. (*)

POLSC 455 Area Study: Africa/Middle East 3(3-0)
Introduction to the political, economic and military structures and processes of the region. (*)

## 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

 (3-6 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 Introduction to 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 2(2-0)
Psychological and biological aspects of human sexual behavior. Prerequisite: PSYCH 100 and sophomore standing. (F)

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 301 Introduction to Psychological Experimentation 3(3-0)
Introduction to basic methods and procedures for data collection and analysis of psychological experiments. Both survey and laboratory-based research designs will be described. Prerequisite: PSYCH 201 and 202. Corequisite: PSYCH 302. (F,S)

## PSYCH 302 Psychological Experimentation Methods

2(2-0)
Introduction to methods of psychological experimentation in animals and humans. Corequisite: PSYCH 301. (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 Psychology 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 4(4-0)
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, 209 L and senior standing. (F,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 (3)
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 (4-12 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 Rdg and Language Arts 4(4-0)
Includes reading and language arts 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 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

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 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) <br> 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. (S)

## 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 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. (S)
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. (S)

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. (*)

## REC 280 Foundations of Therapeutic Recreation 3(3-0)

Community and clinical recreation services for the mentally retarded, law offenders, psychologically impaired, sensory impaired, physically disabled, disadvantaged or aging. (F)

## 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. (S/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. (S)

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. (F)

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 (S)

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. (F)

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. (S)

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)

## 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. (F,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. ( ${ }^{\star}$ )

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 <br> \section*{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 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 320 Modern Social Perspectives 3(3-0)
Social ideas and theory of the 20th century and early 21st century. Topics such as gender, environment, globalization, and information will be addressed. Prerequisite: SOC 101. (*)

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 406 Sociology of Small Groups 3(3-0)

Microsociological analysis of group structure, interaction and dynamics in institutional settings in modern society. (*)
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 412 Occupations and Professions 3(3-0)
Occupations and professions in modern society, including changing structures of careers, issues of expertise, impact of gender and race, the role of education. 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 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 430 Industrial Organizations 3(3-0)
Modern industrial society, emphasis on industry as a type of $\left.{ }_{( }{ }^{*}\right)$ cial organization including roles of management and labor. (*)

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 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 208 Afro-American Heritage 3(3-0)

Analysis of black cultural experiences from African origins and civilization to the present. (*)

SOCSC 209 Blacks in America Today 2(2-0)
Analysis of blacks in today's milieu including problem areas and contemporary issues. (*)

## 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,SS)

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 ( $F, S, S S$ )
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. (F,S)

## 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)

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. (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 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 or equivalent. (F,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)
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. (F,S)
SPN 331 Spanish for Business Professions 3(3-0)
Focus on improving linguistic proficiency within the context of business professions. Prerequisite: SPN 202 and 203 or equivalent. (*)

## 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. (*)

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. (*)

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. (*)
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. (*)

SPN 451 20th-Century Spanish Literature 3(3-0)
Critical reading of selected masterpieces of 20th-Century Spanish literature. Prerequisite: SPN 310. (*)

## SPN 452 Contemporary Spanish American Literature

 3(3-0)Critical reading of selected works of contemporary Spanish American Literature. Prerequisite: SPN 310. (*)

SPN 460 Literary Theory and Hispanic Literature 3(3-0)
The application of contemporary theory to the reading of Hispanic literature. Prerequisite: SPN 310. (*)

SPN 461 Cervantes 3(3-0)
The study of Cervantes, his major works and the period in which they were written. Prerequisite: SPN 310. (*)

## 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. (*)

## SPN 471 Medieval and Golden Age Spanish Literature

3(3-0)
This course is designed to give 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. (*)
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. (*)

SPN 491 Special Topics (1-3 VAR)
Prerequisite: SPN 301 or the equivalent and one of SPN 302306 plus permission of the 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 301 or the equivalent and one of SPN 302-306 plus permission of the instructor. (S)

## 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

## SOCIAL WORK (SW) <br> 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. ( $\mathrm{F}, \mathrm{S}$ )

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: SOC 101, PSYCH 100. Pre or corequisite: BIOL 100 or an approved human biology course. (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. ( $\mathrm{F}, \mathrm{S}$ )
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 230 (CS 230) Chicano: Social and Psychological Study 3(3-0)
Social and psychological forces present in the Chicano community. (F)

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: SW 205, 222, CS 101, a Women's Studies course and acceptance into the Social Work Program. (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 Practice with Abused and Neglected Children

 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 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; completion of any one ECON or POLSC course. (S)

SW 481 Field Seminar I 3(3-0)
Capstone course which integrated 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 foundation courses. Corequisite: SW 488. (F,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: acceptance into the Social Work Program; successful completion of all SW foundation courses, SW 481, SW 488, SW 492. Corequisite: SW 489. (S,SS)

## SW 488 Field Placement I 5(0-16)

Complete 16 clock hours per week Fall semester or 32 clock hours Summer I Block for a total of 224 hours in an approved field practicum agency under the supervision of a professional social worker. Prerequisite: acceptance into the Social Work Program and field practicum; successful completion of social work foundation courses. Corequisite: SW 481. (F,SS)

## SW 489 Field Placement II 5(0-16)

Complete 16 clock hours per week Spring semester or 32 hours Summer II block placement for a total of 224 hours in an approved field practicum agency under the supervision of a professional social worker. Prerequisite: acceptance into the Social Work Program and field practicum; successful completion of all social work foundation classes; SW 481, SW 488 and SW 492. Corequisite: SW 482. (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 210 or MATH 156 or PSYCH 201. (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 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. ( $\mathrm{F}, \mathrm{S}$ )

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,SS)

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 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. (*)

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 <br> 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 240 (CS 240) 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 291 Special Topics (1-3 VAR) (*) Repeatable

WS 301 Theories of Gender and Culture 3(3-0)
Explores the range of feminist theories and their connections to feminist research. (F)

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 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 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 493 Seminar 3(3-0)
Integrates classroom and experiential learning, applying theories and methods to a selected topic in a seminar on women's issues. Prerequisite: WS 301 or permission of instructor. (F,S,SS)

## 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 2009)

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Dr. Scott Eriksen . $\qquad$ CSU-Pueblo Faculty Representative Steve Titus $\qquad$ CSU-Pueblo Student Representative

## COLORADO STATE UNIVERSITY SYSTEM STAFF

Office of the Chancellery

| Frank T. Pierz | Director of Board Relations |
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## Academic Administration

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Allison Horn $\quad$ Director of Internal Auditing
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Anthony A. Frank Interim President
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Joseph A. Garcia President
Trisha Macias Executive Assistant
Colorado State University-Global Campus
Rich Schweigert Chief Executive Officer Julie deFalco Executive Assistant

## ADMINISTRATIVE OFFICES

 (Colorado State University-Pueblo)
## OFFICE OF THE PRESIDENT

Garcia, Joseph A., President
Chang, Lin, Director, Institutional Research \& Analysis
Dadabhoy, Zav, Dean of Student Life and Development
Folda, Joe, Director, Athletics
Macias, Trisha, Executive Assistant to the President
Williams, LaNeeca, Director of AA/EEO, Student Conduct, and Campus Diversity

Zaletel, Cora, Executive Director of External Affairs

## OFFICE OF THE PROVOST

Meyer, Russell J., Provost and Vice President for Academic Affairs

Carrasco, Hector, Dean, College of Education, Engineering, and Professional Studies

Druelinger, Mel, Dean of Graduate Studies and Research and Director of Sponsored Programs

Frew, Erin J., Assistant Provost for Assessment \& Student Learning

Fronmueller, Michael, Dean, Hasan School of Business
Gomez, Cheryl, Principal, Pueblo School for Arts and Sciences

Gonzales, Rhonda, Dean, University Library
Hatton-Montoya, Sharon, Director of Tutoring and Student Academic Services

Kreminski, Richard M., Dean, College of Science and Mathematics

Lopez, Derek, Director, First-Year Programs
Malm, James, Dean of Continuing Education
Marquesen, Victoria, Associate Dean of Education, College of Education, Engineering, and Professional Studies

Marshall, Joseph, Assistant Vice President for Enrollment Management

Niccoli, David A., Chief Information Officer, Information Technology Services

Painter, Barbara, Executive Assistant to the Provost
Sonnema, Roy, Dean, College of Humanities and Social Sciences

## OFFICE OF THE VICE PRESIDENT FOR FINANCE AND ADMINISTRATION

Ballard, Joanne, Vice President for Finance and Administration
Cason, Craig, Director of Facilities Management
Farley, Michael M., Director of Budgets
Garcia, A. Ramón, Director, Auxiliary Services
Nufer, Ken, Director, Human Resources; Disability Resource Officer

Velasquez, Lorrie, Executive Assistant to the Vice President for Finance and Administration

Wilds, Harvey, Director of Finance/University Controller

## ADMINISTRATIVE/FACULTY

Carrasco, Hector R. (1993) Dean of Education, Engineering, and Professional Studies and Professor of Engineering; BSME, MSME, University of Texas at El Paso; Ph.D., Texas A\&M University

Dadabhoy, Zav (2007) Dean of Student Life and Development; BA, MA, University of Wisconsin-Milwaukee; Ph.D., University of Colorado at Denver

Druelinger, Melvin L. (1984) Dean of Graduate Studies, Director of Research and Sponsored Programs, and professor of Chemistry; BS, Indiana University; Ph.D., University of Wisconsin

Fronmueller, Michael (2007) Dean of Hasan School of Business; MBA, Eastern Washington University; Ph.D., Washington State University

Garcia, Joseph A. (2006) President, Colorado State University-Pueblo; BS, University of Colorado; J.D., Harvard Law School

Gonzales, Rhonda (1999) Dean, University Library; BA, Colorado College; MSLIS, Simmons College

Kontz, Mary (2006) Associate Dean of Nursing, College of Education, Engineering, and Professional Studies; BSN, MSN, Ph.D., University of Miami

Kreminski, Richard M. (2009) Dean, College of Science and Mathematics; S.B., Massachusetts Institute of Technology; MA, Ph.D., University of Maryland; J.D., Dedman School of Law, Southern Methodist University

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

Meyer, Russell J. (2000) Provost and Vice President for Academic Affairs; BA, MA, Ohio State University; Ph.D., University of Minnesota

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

## ADMINISTRATIVE/PROFESSIONAL STAFF

Alexander, Kelly (2008) Assistant Athletic Trainer, Athletics; BS, University of Wisconsin-Eau Claire

Anderson, Britt (2008) Academic Advisor, First-Year Programs; BA, Colorado State University-Pueblo

Arellano, Stephanie (2003) Program Coordinator and Health Educator, EXHPR; BS, Colorado State University-Pueblo

Arriaga, Ramon (2007) Assistant Volleyball Coach, Athletics
Atencio, Mike (2007) Station Manager, KTSC-FM; BS, Colorado State University-Pueblo

Baird, Tanya (2006) Internship Coordinator, Career Center; BA, MNM, Regis University

Ballard, Joanne (2003) Vice President for Finance and Administration; BS, Metropolitan State College; BA, Briar Cliff College

Balles, Ivan G. (2006) Academic Advisor, First-Year Programs; BS, Colorado State University-Pueblo

Barnosky, John (2007) Architect, Colorado License \#B-835, Director of Planning/Construction, Facilities/Physical Plant; BA, University of Colorado

Benesch, Susan (2001) Human Resources Associate; BSBA, University of Northern Colorado

Berg, Kelli (2008) Assistant Volleyball Coach, Athletics; BA, Kansas Wesleyan University

Borland, Barbara (1994) Program Manager, Continuing Education; BS, Colorado State University-Pueblo; MA, University of Colorado, Colorado Springs

Boulier, Shaun (2007) Academic Advisor, First-Year Programs; BA, Colorado State University-Pueblo

Brewer, Margaret (1997) Systems Manager, Student Financial Services; 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) Network Administrator, 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

Campbell, Joseph (1998) Manager Network/Systems Services, Information Technology Services; BS, Colorado State University-Pueblo

Capo, Darcie (2007) Interim Transfer Coordinator, Admissions; BS, Fort Hays State University

Capo, Jeremy (2007) Assistant Athletic Director, 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) Director of Facilities Management; BS, University of Colorado-Boulder

Cates, Libbey (2007) College Access Advisor, Southern Colorado Educational Opportunity Center; AAS, University of Wisconsin, BS, Ripon College

Chacon, Loisann (1994) Counselor, Upward Bound; BA, George Washington University; MA, Antioch University

Chambers, Pam (2000) Associate Director, Student Academic Services; BA, University of North Alabama; MSW, University of Alabama

Chang, Lin (2000) Director, Institutional Research and Analysis; BA, Fu Jen University (Taiwan); MA, Michigan State University; Ph.D., Michigan State University

Charles, Dax (2007) Head Wrestling Coach, Athletics; BS, Colorado State University-Pueblo; MBA, University of Phoenix

Choat, Dorothy (2009) Lamar Site Coordinator, Southern Colorado Educational Opportunity Center; AGS, Lamar Community College

Damania, Nicky (2007) Interim Director of Student Activities; BA, Colorado College; MA, Bowling Green State University

De Herrera, Rick R. (2006) Assistant Director of Facilities
Dehn, Ron (1970) Transfer Counselor/Recruiter, Admissions; BS, Colorado State University-Pueblo

Denton, Jennifer (2009) Manager of Gifts \& Records, CSUPueblo Foundation; BS, Rice University

Deulen, Jill (2003) Interlibrary Loan Assistant; BA, Colorado State University-Pueblo

Doherty, Erin (2008) Admissions Counselor, Admissions; BA, Colorado State University-Pueblo

Douglas, Stacey L. (2007) Bookstore Manager; BA, California State University-Fresno; M.Div, Trinity International University

Drown, Kip (2005) Head Women's Basketball Coach, Athletics; BS, MS, Southwest Missouri State University

Duran, Elizabeth (2001) Degree Audit Specialist; Records Office; BS, University of Phoenix

Durham, Tom (2007) Head Men's and Women's Tennis Coach; Athletics

Early, Alicia (2003) Assistant Director of Development for Annual Giving, CSU-Pueblo Foundation; BS, West Texas A\&M University

Eberhart, Pat (2005) Head Coach Men's Basketball, Athletics; BSBA Adams State College, M.Ed., Colorado Christian University

Esgar, Daneya (2008) Interim Student Activities Event Coordinator, Student Life and Development; BS, Colorado State University-Pueblo

Farley, Michael M. (2009) Director of Budgets, Finance and Administration; BS, Regis University; MSBA, Colorado State University

Fendrich, Carlotta (2007) Director and Nurse Practitioner, Student Health Services; AA, Otero Junior College; BSN, Colorado State University-Pueblo; MS, Beth El College of Nursing and Health Sciences at UCCS

Ferguson, Gina (2007) Activity Coordinator, First-Year Programs; BA, Colorado College; MS, University of Kansas

Fitzgerald, Leslie (2008) Office Manager, Teacher in Residency Program; BA, Colorado State University-Pueblo

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

Fugate, Brett (2008) Academic Advisor, First-Year Programs; BA, Cornell University

Fraser-Mills, Michelle (2000) Director, Business Financial Services; BS, Colorado State University

Frew, Erin J. (2008) Assistant Provost for Assessment \& Student Learning, Provost's Office; B.C.H., MS, Ph.D., New Mexico State University

Gallegos, Joe (2006) Director of Environmental Health \& Safety; BS, Colorado State University-Pueblo

Gallegos, Valerie (2007) Finance Manager, CSU-Pueblo Foundation; BS, Colorado State University-Pueblo

Garcia, Corrin (2002) Manager of Finance and Accounting, Continuing Education; BSBA, MBA, Colorado State University-Pueblo

Garcia, A. Ramón (2005) Director of Auxiliary Services; BS, Howard Payne University; MRE, Golden Gate Baptist Theological Seminary

Giannetto, Michael P. (2008) Math/Science Tutoring Coordinator, Student Academic Services; BS, Colorado State University-Pueblo; MS, Washington 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, Cheryl (2002) Principal, Pueblo School for the Arts and Sciences; BS, Colorado State University-Pueblo; MA, University of Phoenix

Gonzales, Doreen Y. (2008) Nursing Program Associate; BA, MBA, University of Phoenix

Gonzales, Felix (1992) Field Coordinator, Social Work; BA, Colorado State University-Pueblo; MSW, Arizona State University

Grutt, Elizabeth (2006) External Degree Student Advisor, Continuing Education; BS, Colorado State University-Pueblo; MA, University of Colorado at Colorado Springs

Haban, Pam (2005) College Access Advisor, Southern Colorado Educational Opportunity Center; BS, Colorado State University; MC, Arizona State University

Hadley, Barbara (2003) Counselor, Student Counseling Center; BA, Colorado State University; MA, Adams State College

Haight, Robert (2008) Assistant Director Residence Life/Housing, Student Life and Development; BA, Metropolitan State College of Denver; MPA, University of Colorado at Denver

Hartman, Josh (2005) Head Women's Golf Coach, Athletics; BA, Dakota Wesleyan University

Hatfield, John Paul (2005) Instrument Technician, Chemistry Department; BS, MS, Colorado State University-Pueblo

Hatton-Montoya, Sharon (1994) Director of Tutoring and Student Academic Services; BA, Colorado State UniversityPueblo; MA, University of Colorado at Colorado Springs

Haywood, Leslie (2006) Assistant Women's Basketball Coach, Athletics; BS, Colorado State University-Pueblo

Healy, Angela (2003) Program Manager External Degree Program, Continuing Education; BA, California State University-Stanislaus; MA, Chapman University

Herrera, Veronica (1989) Assistant Director, Southern Colorado Educational Opportunity Center; BSW, Colorado State University-Pueblo

Hibbert, Keli (2002) Writing Room 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

Hughes, Michal (2004) Assistant Director, Student Recreation; BS, M.Ed., Hardin-Simmons University

Jaime, Rita (2007) Student Financial Aid Counselor, Student Financial Services; BA, Colorado State University-Pueblo

Jantz, Stig (2002) Undergraduate Academic Advisor, Hasan School of Business; BA, California State University-Northridge

Jonson, Chris (2007) Head Volleyball Coach, Athletics; BA, Colorado Christian University

Kelly, Todd (2003) Athletic Development and Major Gifts Officer; BS, Colorado State University-Pueblo

Koncilja, Geri (2001) Coordinator Instructional Technology Center, Information Technology Services; BS, Colorado State University-Pueblo

Krider, Jack (2008) Director Student Recreation; BA, MA, University of Northern Colorado

Kumm, James (2008) Admissions Counselor, Admissions; BS, Colorado State University-Pueblo

Laino, Heidi (1997) Coordinator, International Recruitment; BSBA, MBA, Colorado State University-Pueblo

Leomiti, Donnell (2008) Football Defensive Backs Coach/Recruiting Coordinator, Athletics; BA, University of Colorado

Lopez, Derek (2007) Director, First-Year Programs; BA, Colorado State University-Pueblo; Ph.D., Stanford University

Lundahl, Sandra L. (1985) Counseling Manager, Student Financial Services; AAS, BSBA, Colorado State UniversityPueblo

MacArthur, Terry (2008) Online Writing Lab Coordinator, Student Academic Services; BA, Colorado State UniversityPueblo

Macias, Trisha (2003) Executive Assistant to the President; BA; University of Colorado-Boulder; MBA, Colorado State University-Pueblo

Makloski, Raymond (2008) Head Men's Golf Coach, Athletics

Malm, James (2005) Dean, Continuing Education; BS, MPA, Penn State; D.M., University of Maryland

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

Marshall, Joseph (2004) Assistant Vice President for Enrollment Management; BA, MA, California State UniversityFullerton

Martin, Lisa (2005) Group Fitness Coordinator, Student Recreation; BS, Colorado State University-Pueblo

McGivney, Sean (2006) Director of Financial Aid, Student Financial Services; BS, University of Vermont

McKinney, Joseph A. (2008) Academic Improvement Program Coordinator, Student Academic Services; BA, Colorado State University-Pueblo; MA, Colorado State University

Meister, John (2006) Disability Resource Coordinator, Student Academic Services; BS, Slippery Rock University of Pennsylvania; MS, University of North Texas

Melin, Carl (1985) Associate Director of Transfer Admissions, Admissions; BA, Adams State College; MS, University of Southern California

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, James (2006) Assistant Men's Basketball Coach, Athletics; BA, Colorado State University; MA, University of Northern Colorado

Miller, Jeff (2009) Interim Web Communications Manager, External Affairs; BA, Columbia College

Miller, Rhonda (2008) Citadel Site Manager, Continuing Education; BS, Northern Arizona University

Miller, Tom (2007) Assistant Head Football Coach, Athletics; BS, State University of New York at Cortland; M.Ed., University of Bridgeport

Minatta, Louis (1996) Graduation Evaluator, Records Office; AAS, Pikes Peak Community College; BS, Colorado State University-Pueblo

Montoya, Tony (2003) Counselor, Upward Bound; BS, Metropolitan State College; MPA Bernard Baruch College

Moore, Dennis (2002) Director, Hoag Hall; BA, Colorado State University-Pueblo

Moore, Derek (2009) Financial Aid Counselor, Student Financial Services; BSBA, Union University

Moreschini, Shelly (2004) Director, President's Leadership Program; BS, Colorado State University-Pueblo; MA, Regis University

Morris, Dave (2007) Head Women's Soccer Coach, Athletics; BA, University of Michigan at Ann Arbor; M.Ed., Frostburg State University

Niccoli, David A. (1980) Chief Information Officer, Information Technology Services; AAS, BS, Colorado State University-Pueblo

Nichols, Steven (2004) Assistant Director, Veterans Upward Bound; BA, Professional Clear Teaching Credential, Humboldt State University

Nordholm, Holland (2007) Sites Manager, Continuing Education; BS, Colorado State University-Pueblo

Nufer, Ken (2004) Director, Human Resources and University's Disability Resource Officer; BSBM, University of Phoenix; PHR, Human Resource Certification Institute

Ochs, Daniel (2008) Assistant Baseball Coach, Athletics; BS, Colorado State University-Pueblo

Oliver, David G. (2004) Coordinator Help Desk Services, Information Technology Services; BS, Colorado State University-Pueblo

Painter, Barbara (2006) Executive Assistant to the Provost; BA, Wayland Baptist University

Paris, Stephanie (2008) Assistant Softball Coach, Athletics; BS, University of Tennessee at Martin

Paul, James (1992) Trainer, Athletics; BS, University of Utah
Pechek, Lindsay (2007) MBA Coordinator, Hasan School of Business; BS, Northwest Missouri State University

Perez, Ricardo (Rick) M. (2008) Peterson Air Force Base Site Manager, Continuing Education; AAS, Community College of the Air Force; BS, Troy State University; MA, Webster University

Perez, Shawntelle (2005) Counselor, Admissions; BS, Colorado State University-Pueblo

Perry, Chad A. (2007) Head Women's Cross Country and Track and Field Coach, Athletics; BA, University of Texas at Austin

Pfingston, Valerie (1997) Grant Accounting Coordinator, Controller's Department; BSBA, Colorado State UniversityPueblo

Potestio, DenaSue (2007) Executive Director of University Development, CSU-Pueblo Foundation; BS, MBA, University of Denver

Rincon, Eric (2004) Pueblo Site Coordinator, Southern Colorado 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 (2006) Graduation Evaluator, 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, Visitor and Transfer Center; BS, Colorado State University-Pueblo
Sanchez, Crystal (2008) Alcohol and Other Drug Education Program Coordinator, Student Life; BS, Colorado State University-Pueblo; MPH, Walden University

Sanchez, Stan (1994) Head Baseball Coach, Athletics; BS, California State University; MA, Azusa Pacific University

Sandoval, John (2005) Academic Advisor and Orientation Coordinator, First-Year Programs; BS, Adams State College

Sandstrom, Anthony (2007) Sports Information Director, Athletics; BA, Colorado State University-Pueblo

Schwartz, Lisa (2008) Recruitment and Student Support, Teacher in Residence Program; BA, MA, Colorado College
Sciacca, Tiffany (2008) Admissions Counselor, Admissions; BA, Colorado State University-Pueblo

Sewell, Steve (2007) Football Running Backs Coach; Athletics; BA, University of Oklahoma

Showalter, Thomas S. (2002) Head Women's Softball Coach, Athletics; BA, MS, Adams State College

Sissom, Lia (1996) MBA Director and Special Assistant to the Chair and Dean, Hasan School of Business; BA, MS, Western Illinois University

Stanley, Roy (1994) Head Coach, Men's and Women's Soccer, Athletics; BA, Princeton University; MA, University of Tulsa

Stultz, Fred (1999) Director, Student Counseling Center; BA, Colorado State University-Pueblo; Ph.D., Purdue University

Symington, Christopher E. (2009) Assistant Football Coach, Athletics; BA, University of Colorado at Boulder

Taibi, Tony (2008) Coordinator of Business Services, Student Recreation Center; BSBA, Colorado State University-Pueblo

Thorsten, Greg (2005) Financial Aid Counselor, Student Financial Services; BA, University of Northern Colorado

Toth, John M. (2005) Finance Manager Auxiliary \& Athletic Services, Auxiliary Service; BS, Colorado State UniversityPueblo

Trujillo-Aranda, Brenda (1996) Director, Student Support Services; AAS, Pueblo Community College; BS, Regis University; MA, Adams State College

Trujillo, Dana, (2005) Director, Admissions; BS, Colorado State University-Pueblo

Tuatoo, Vaiulatasi (2006) Instructor/Tutor Coordinator, Student Support Services; AA, American Samoa Community College; BA, Chaminade University of Honolulu; MA, San Diego State University; DPA, Golden Gate University

Uber, Rhonda Park (2008) Director of Residence Life and Housing; BS, University of Utah; MS, Southern Illinois University

Van Kampen, Janet (2007) Data Analyst, First-Year Programs; BS, Colorado State University-Pueblo, MA, University of Northern Colorado

Veale, Scotti (2007) Fort Carson Site Manager, Continuing Education; BA, University of Maryland; MS, Ph.D., Capella University

Vega, Theresa (2008) Trinidad Site Coordinator, Southern Colorado Educational Opportunity Center; BA, Colorado State University-Pueblo

Velarde, Katie (2004) Registrar and Associate Director of Records; BSBA, MBA, Colorado State University-Pueblo

Velasquez, Lorrie (2007) Executive Assistant to the Vice President of Finance and Administration; BS, Regis University

Vigil, Sheri R. (2007) Assistant Director of Auxiliary Services; BS, MA, Regis University

Waggener, Conrad (2005) Director, Veterans Upward Bound; BA, University of Colorado; MBA, University of Hawaii

Walda, Kevin (2005) Assistant Director, Veterans Upward Bound; BS, University of Colorado, Colorado Springs

Whatley, Nancy (1986) Assistant Director, Southern Colorado Educational Opportunity Center; AS, Otero Junior College

Whitaker, Niki (2006) Associate Director of Athletics; BS, Colorado State University-Pueblo

White, Orlando (2008) Interim Residence Hall Director; BS, Colorado State University-Pueblo

Wilds, Harvey (2006) Director of Finance/University Controller; BBA, University of New Mexico

Williams, Annie (1994) Associate Director, Center for International Programs; BA, MBA, Colorado State UniversityPueblo

Williams, LaNeeca (2008) Director of AA/EEO, Student Conduct and Campus Diversity; BS, MS, Indiana State University

Williams, Rodney (2008) Interim Educational Development Specialist, Student Support Services; BS, MS, Indiana State University

Wilson, Kathleen J. (2000) Professional Development and Induction Coordinator, Teacher Education Program; BA, University of Northern Colorado; MS, University of WisconsinLa Crosse

Wristen, John T. (2007) Head Coach Football, Athletics; BS, Colorado State University-Pueblo; MA, Adams State College

Wulf, Christy (2008) Interim Director of Alumni Relations \& Annual Fund; BS, University of Kansas

Yang, Sixian (2008) Institutional Research Analyst, Institutional Research and Analysis; BA, Peking University; MBA, Marquette University

Young, Michelle (2007) First-Year Advisor, First-Year Programs; BSW, Colorado State University-Pueblo

Zaletel, Cora (2002) Executive Director, External Affairs; BS, MA, Emporia State University; Ph.D., ABD, University of Kansas

## RANKED FACULTY

The following individuals were ranked faculty members in the 2009-2010 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

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

Bailey, Wade H. (1993) Professor of Civil Engineering Technology; BS, West Virginia University; MS, Air Force Institute of Technology

Barnett, Janet H. (1990) Professor of Mathematics; BS, Colorado State University; MA, Ph.D., University of Colorado

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

Bloxsom, William A. (2008) Assistant Professor of Engineering; BS, Eastern Michigan University; BS, MS, University of Colorado, Denver; Ph.D., University of Nevada, Las Vegas

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, lan (2003) Professor of Marketing; BA, University of Nottingham; MBA, University of Evansville; Ph.D., University of Texas-Arlington

Bridgmon, Krista D. (2008) Assistant 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

Bruch, Courtney (2006) Assistant Professor of Library Services; BA, University of Missouri-Kansas City; MA, University of Missouri-Columbia
Calhoun-Stuber, Susan (1994) Assistant Professor of Sociology; 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; BA, Incarnate Word College; MA, Catholic University; Ph.D., University of Washington

Cerankowski, Leah (2007) Assistant 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

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) Assistant Professor of Computer Information Systems; BCE, MCE, Chungbuk National University, Korea; BS, MCS, ABD, 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, Department Chair and Associate Professor, EXHPR; BS, University of Illinois; MS, University of Arizona; Ph.D., University of Pittsburgh

Cobián-Klein, Dora Luz (1995) Associate Professor of Spanish; BA, MA, University of California at San Diego; Ph.D., University of California at Riverside

Conroy, Colleen (2001) Clinical Instructor of Athletic Training, EXHPR; BS, New Mexico State University; MSEd., Northwest Missouri State University

Crownover, Joann (2006) Assistant Professor of Nursing; BSN, Loretta Heights College, Denver; MSN, Northern Arizona University

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

Darby, Ronald L. (1991) Associate Professor of Automotive Industry Management; AAS, BS, Colorado State UniversityPueblo; MA, Colorado State University-Pueblo

DePalma, Jude (1997) Associate 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

Djatej, Arsen (2009) Assistant Professor of Accounting; BA Moscow State University of International Relations, MBA, MSA, Boise State University; Ph.D., Ohio University
Duncan, James L. (1958) Professor of Music; BM, Central College; MM, Eastman School of Music

Duncan, Kevin C. (1994) Professor of Economics; BA, University of California at Riverside; Ph.D., University of Utah

Ebersole, Samuel (1990) Professor of Mass Communications; BA, Southern California College; MA, Ph.D., Regent University

Eriksen, Scott (2005) Associate Professor of Accounting; BS, University of Illinois; MS, Ph.D., University of North Texas

Eskew, Douglas (2008) Assistant Professor of English; BA, MA, Ph.D., University of Texas-Austin

Farrer, Richard (2006) Assistant Professor of Chemistry; BS, Aquinas College, Grand Rapids, Michigan; Ph.D., Boston College

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 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

Frank, Katherine (2001) Associate Professor and Department Chair of English; BA, Bates College; MA, Ph.D., University of Washington

Franta, B. Joe. (2007) Assistant Professor of Nursing; BSN, Colorado State University-Pueblo; MSN, Beth-El College of Nursing and Health Sciences at UCCS

Fronmueller, Julie (2007) Assistant Professor of Library Services; MBA, Boise State University, MLIS, Louisiana State University

Fraser, Jane (1998) Professor and Department Chair, Engineering; BA, Swarthmore College; MS, Ph.D., University of California at Berkeley

Funk-Neubauer, Darren (2007) Assistant Professor of Mathematics; BS, University of Michigan-Dearborn; MA, Ph.D., University of Wisconsin-Madison

Gabaldon, Annette (2004) Assistant Professor of Biology; BS, New Mexico State University; Ph.D., University of California-Davis.

Galloway, Ann (2007) Assistant Professor of Nursing; BSN, University of Oklahoma; MSN, Clemson University

Gentry, Lance (2009) Associate Professor of Marketing; BSBA, MBA, University of Tennessee College of Business; Ph.D., Michigan State University

Gilbreath, Brad (2008) Assistant Professor of Management; BA, MBA, Baylor University; MS, Purdue University; Ph.D., New Mexico State University

Gomme, lan (1995) Professor and Department Chair 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

Gose, Mark N. (2004) Associate Professor of Political Science; BA; New Mexico State University; MA, Naval Post Graduate School-Monterey; Ph.D., University of Colorado

Green, Pearl (Penny) (1982) Assistant Professor of Sociology; BA, City College of New York; MA, Ph.D., Southern Illinois University

Griffin, John R. (1963) Professor of English; BS, MS, Xavier University; Ph.D., Ottawa University; Ph.D., Trinity College, Dublin, Ireland

Hanks, Bettye Sue (1994) Professor of Business Administration; 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) Assistant Professor of History; BA, MA, Brigham Young University-Provo; Ph.D., Syracuse University

Hassan, Aun (2009) Assistant 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

Howell, Kris (1999) Associate Professor of Computer Information Systems; BSBA, Colorado State UniversityPueblo; MBA, University of Arkansas; Ph.D., Colorado State University

Hudock, Sandra (1997) Associate 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

Ihm, Dana E. (2005) Associate Professor of Music; BA, MM, Pittsburg State University; Ph.D., University of South Carolina

Jaksic, Nebojsa I. (2000) Associate 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

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) Associate 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) Assistant Professor of Chemistry; BA, University of California at San Diego; Ph.D., Colorado School of Mines

Khosrowpour, Shahrzad (2008) Instructor 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

Kulkosky, Paul J. (1984) Professor of Psychology; BA, Columbia College; MA, Columbia University; Ph.D., University of Washington

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, 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

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) Assistant 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

Lundberg, Bruce (1993) Professor of Mathematics; BS, Grand Canyon University; MA, Arizona State University; MA, Fuller Theological Seminary; Ph.D., Colorado State University

Madrid, Leasher Dennis (1976) Professor of Psychology; BA, Colorado State University-Pueblo; MS, New Mexico Highlands University; Ph.D., University of California at Santa Barbara

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) Assistant Professor of Education; AGS, Pueblo Community College; BSBA, Colorado State University-Pueblo; MS, 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

McClure, Suzanne (2007) Assistant Professor of Nursing; BSN, MS, Colorado State University-Pueblo

McGettigan, Timothy (2000) Professor of Sociology; BA, University of California, Santa Barbara; MA, Ph.D., Washington State University

McLean, Janna R. (2003) Associate Professor of Biology and Interim Dean, College of Science and Mathematics; BA, Hope College; Ph.D., Carnegie Mellon University

MeInykov, Igor (2005) Assistant Professor of Mathematics; BS, Kharkov State Polytechnic University, Kharkov, Ukraine; Ph.D., Bowling Green State University

Messer, Chris (2008) Assistant Professor of Sociology; BA, MA, Ph.D., Oklahoma State University

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, A.B.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

Montgomery-Ratcliff, Barbara M. (2001) Professor of Speech; BS, Ball State University; MA, Memphis State University; Ph.D., Purdue University

Montoya, Fawn-Amber (2007) Assistant Professor and Coordinator of Chicano/a Studies; BA, Brigham Young University; MA, Ph.D., University of Arizona

Morales, Juan (2007) Assistant Professor of English and Director of Creative Writing; BA, Colorado State UniversityPueblo; MFA, University of New Mexico

Mullen, Jennifer (1990) Professor of Mass Communications; BA, Colorado State University-Pueblo; MA, University of Northern Colorado

Nichols, Janet G. (1977) Assistant Professor of Mathematics; BA, Adelphi University; MS, Lehigh University

Noel, Judy (2003) Associate Professor of Social Work; BA, University of Wisconsin-Oshkosh; MSW, University of Wisconsin-Milwaukee; Ph.D., University of Southern California

Norman, Steve (2008) Assistant 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

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Pardue, Karen (2005) Assistant Professor of Library Services; BA, University of Colorado-Colorado Springs; MSLIS, University of Illinois

Peters, Caroline (2006) Assistant Professor of Art; BFA, Northern Illinois University; MFA, University of Montana

Peters, Jennifer Shadle (2005) Associate Professor of Music; BA, MM, Sam Houston State University; Ph.D., St. Louis University

Peters, Timothy W. (2005) Assistant Professor of Education; BA, Carleton College; MS, University of Michigan

Pettit, Sue L. (2005) Assistant 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) Assistant Professor of Mathematics; A.B., Harvard University, S.M., Ph.D., University of Chicago

Pratarelli, Marc E. (1999) Professor of Psychology; BA, University of California, San Diego; MA, Ph.D., University of Southern California

Proctor, Kristina G. (1989) Professor of Chemistry; BS, Colorado State University-Pueblo; Ph.D., Colorado State University

Rees, Jonathan (1999) Associate 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; MA, Colorado State University

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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

Ryan, John E. (1980) Professor of Education; BA, University of California at Los Angeles; MA, California State University at Northridge; MA, Ph.D., Claremont Graduate School

Sandoval, David A. (1980) Professor Chicano Studies and History; BS, Eastern New Mexico University; MA, Southern Methodist University; Ph.D., University of Utah

Sarper, Hüseyin (1988) Professor of Engineering; BS, The Pennsylvania State University; MS, Ph.D., Virginia Polytechnic Institute and State University

Seilheimer, Jack A. (1963) Professor of Biology, BS, Western Michigan University; Ph.D., University of Louisville, Kentucky

Shah, Abhay (1988) Professor of Marketing; BA, St. Xavier's College (Calcutta University); MBA, University of Evansville; Ph.D., Oklahoma State University

Smith, Darrin M. (2004) Assistant Professor of Athletic Training, EXHPR; BS, Concordia University; MS, Western Illinois University

Smith, Jeff (2006) Assistant Professor of Biology; BA, BS, University of Minnesota; Ph.D., University of New Mexico School of Medicine

Souder, Donna M. (2008) Assistant professor of English; BS, MA, Texas A\&M University-Texarkana; Ph.D., Texas Women's University

Spade, Beatrice (1993) Associate Professor of History; BA, University of Colorado; MA, University of Hawaii; MA, National Taiwan University; Ph.D., Harvard University

Spencer, Dawn (2004) Assistant Professor of Computer Information Systems; BS, MS, Ohio State University

Steffen, Leticia (2004) Assistant Professor of Mass Communications; BA, Saint Louis University; MA, University of Denver

Stuyt, Jeff A. (1999) Associate Professor of Exercise Science, Health Promotion, and Recreation; BA, MS, Wageningen University; Ph.D., Texas A \& M University

Sullivan, Daniel R. (1970) Associate Professor of Library Services; BA, University of Kentucky; MLS, University of Oregon

Taylor, Cynthia (1989) Associate Professor of English; 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

Vanden Heuvel, Brian D. (2004) Associate Professor of Biology; BS, Colorado State University; Ph.D., University of Texas at Austin

Wakefield, Michael (2000) Associate 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

Waronska, Agnieszka (2005) Assistant Professor of Management; MS, Silesian University of Technology; ABD, University of Toledo

Whited, Hsin-hui (2001) Associate Professor of Economics; BS, Soochow University; MA, Ph.D., The Claremont Graduate School

Wilkes, Linda M. (1983) Professor of Chemistry; BA, California State University; Ph.D., University of Nevada at Reno

Yescavage, Karen (1992) Associate Professor of Psychology; BS, Northwest Missouri State University; MA, Ph.D., University of North Carolina

Yuan, Ding (Elena) (2007) Assistant 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

Bamber, Lisa (2005) Lecturer of Speech Communication; BA, MA, Colorado State University

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

Johnston, Tatiana (2007) Lecturer of Spanish; BA, MA, DeVry University

Martinez, Wayne C. (2006) Lecturer of Computer Information Systems; BS, MBA, Colorado State University-Pueblo

Matusiak, Frederick C. (2005) Lecturer of History; BA, Iona College; MA, Ph.D., University of Nebraska

Murgel, Frank (2006) Lecturer of French; BS, Colorado State University-Pueblo; MBA, University of Northern Colorado; Diplôme Supérieur, Sorbonne; Certificat Pratique, Sorbonne.

Prias, Myriam (2007) Lecturer of Spanish; BA, University of North London, England; MA, Florida International UniversityMiami

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; Ph.D., Texas Christian University

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

Wink, Geri (2004) Lecturer of Accounting; BBA, MBA, Sam Houston State University

## ARTISTS-IN-RESIDENCE

Afanassieva, Veronika (1999) Artist-in-Residence, Veronika String Quartet; BA, State Music College, Russia; MM, Gnesins' Russian Academy of Music; MM, Miami University of Ohio

Artmann, Mary (2006) Artist-in Residence, Veronika String Quartet; BA, University of California at Berkeley; Master of Music, University of Southern California

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

Dobrotvorskaia, Ekaterina (2001) Artist-in-Residence, Veronika String Quartet; BA, DMA, MM, Moscow State Conservatory

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

Garibova, Karine (1999) Artist-in-Residence, Veronika String Quartet; BA, MM, Gnesins' Russian Academy of Music; DMA, Gnesins' State Institute of Music; MM, Miami University of Ohio

Sizer, Todd G. (2006) Artist-in-Residence, Music; BME; Indiana University, Bloomington

Turner, Aaron (2005) Artist-in-Residence; Music; BM, Lawrence University; MM, University of North Texas

## PUEBLO SCHOOL OF ARTS AND SCIENCES

Allen, Natalie (2000) Instructor
Annand, Carol (1995) Assistant Principal
Benavidez, Don (2006) Program Coordinator
Berg, Tara (2004) Instructor
Castro, Jason (2008) Instructor Aide
Cesar, Carolyn (2006) Instructor
Dodge, Janine (2007) Kindergarten Aide
Feliciano-Maldonado, Clarissa (2000) Instructor
Fry, Debbie (2005) Instructor
Gagliardi, Lisa (2001) Instructor
Gallegos, Brandy (2007) Instructor
Garcia, John (2006) Custodian
Gomez, Cheryl (2002) Principal
Griffin, Pat (2007) Instructor
Hall, Jessica (2005) Instructor
Hartgraves, Stephanie (1994) Instructor
Hernandez, Ray (2006) Technology
Holbrook, Tiffany (2007) Instructor
Hribar, Helen (2008) Kindergarten Aide
Jacquez, Amber (2008) Instructor
King, Karri (2008) Instructor
Lagrotteria, Troy (2004) Instructor
Leyh, Lori (2006) Instructor
Lieder, Theresa (2000) Attendance Secretary
Lucero, Marilyn (1998) Instructor
Marino, Michael (2002) Instructor
Martinez, Theresa (2008) Office Aide
Marsh, Nathan (2007) Instructor
Medina Evelyn (2000) Counselor
Montano, Julia (2005) Instructor
Moser, Shannon (2005) Instructor
Oreschnick, Darlene (2004) Instructor
Quintana, Nicole (2006) Instructor
Perez, David (2008) Instructor
Ramu, Cynthia (1998) Instructor
Riccillo, Maria (2004) Instructor
Ripke, Melanie (2004) Instructor
Rodell, Christina (2003) Instructor
Sisson, Donna (2005) Instructor
Stephenson, Peggy (2003) Secretary to the Principal
Tapia, Efrain (2008) Instructor
Vigil, Ramona (2008) Instructor
Wach, Bill (2003) Instructor
Wolnick, James (2006) Instructor

## EMERITUS FACULTY

Abrahamson, Gayle (1985-2008) AA, BA, MAR, MA, Associate 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) Professor Emerita of English; BA, MA, Ph.D., Texas Christian University

Bartlett, Thomas J. (1967-1977) BS, MA, Professor Emeritus of Mathematics

Bassein, Beth Ann (1966-1991) BA, MA, Ph.D., Professor Emerita of 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

Bory, Rosanne (1984-2008) BA, MA, MA, Associate 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

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 and Marketing

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
Kuntzman, Ann (1993-2002) BA, MLS, Associate 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

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

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

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

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

Sauer, Wolfgang (1993-2007) Diplom Ingenieur, Ph.D., Professor Emeritus of Mechanical Engineering

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

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
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
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## 2200 Bonforte Boulevard

PUEBLO, COLORADO 81001-4901


[^0]:    Fall Semester
    .August 1
    Spring Semester
    January 2

[^1]:    MUS 346
    Piano Literature .2
    (Substitute for 2 credits of Functional Piano, MUS 127 and 227)

