CSUpueblo

2011-2012 *Catalog*

www.colostate-pueblo.edu/catalog

UNIVERSITY CALENDAR 2011-2012
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/Records/SemesterNotes/Pages/SemesterNotes.aspx prior to the beginning of each semester.

FALL   2011

Graduation Planning Sheets Due .... Feb. 4 (11)

Registration Begins .... March 14
New First-Year Student Orientation and
    Advisement/Registration .... Aug. 17 - 19
Classes Begin .... Aug. 22
End Add Period (full-term courses) .... Aug. 26
End Drop Period (full-term courses) .... Sept. 5
End of Full-term Course Withdrawal Period ..... Oct. 21
Thanksgiving Break .... Nov. 21 - 25
Classes End .... Dec. 2
Final Exams .... Dec. 5 - 9

SPRING   2012

Graduation Planning Sheets Due .... Sept. 9 (11)

Registration Begins .... Oct. 17 (11)
New First-Year Student Orientation and
    Advisement/Registration .... Jan. 13
Classes Begin .... Jan. 16
End of Add Period (full-term courses) .... Jan. 20
End Drop Period (full-term courses) .... Jan. 30
End of Full-term Course Withdrawal Period .. March 16
Spring Break .... March 26 - 30
Classes End .... April 27
Final Exams .... April 30 – May 4
Commencement .... May 5

Short-term courses in Fall and Spring have shorter course drop and withdrawal dates. These appear on the student schedule.

SUMMER COLLEGE

Summer College consists of multiple sessions. 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   2012

Graduation Planning Sheets Due .... Feb. 3 (12)

Registration Begins .... March 12

First 4, 6 and 12-week Sessions

Classes Begin .... May 14
Memorial Day (University Closed) .... May 28 (M)
Independence Day Holiday Observed
    (University Closed) .... July 4 (W)
Classes End
    (First 4-week) .... June 7
    (First 6-week) .... June 21
    (12-week) .... August 2

Second 4-week Session

Classes Begin .... June 11
Independence Day Holiday Observed
    (University Closed) .... July 4
Classes End .... July 5

Second 6-week Session

Classes Begin .... June 25
Independence Day Holiday Observed
    (University Closed) .... July 4
Classes End .... August 2

Third 4-week Session
Classes Begin .... July 9
Classes End .... August 2

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

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

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 University-Pueblo 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) 549-2418.

Colorado State University PUEBLO™

PARKING SECTORS

NORTH: N-1, N-2, N-3, N-4, N-5, N-6, N-7, N-8

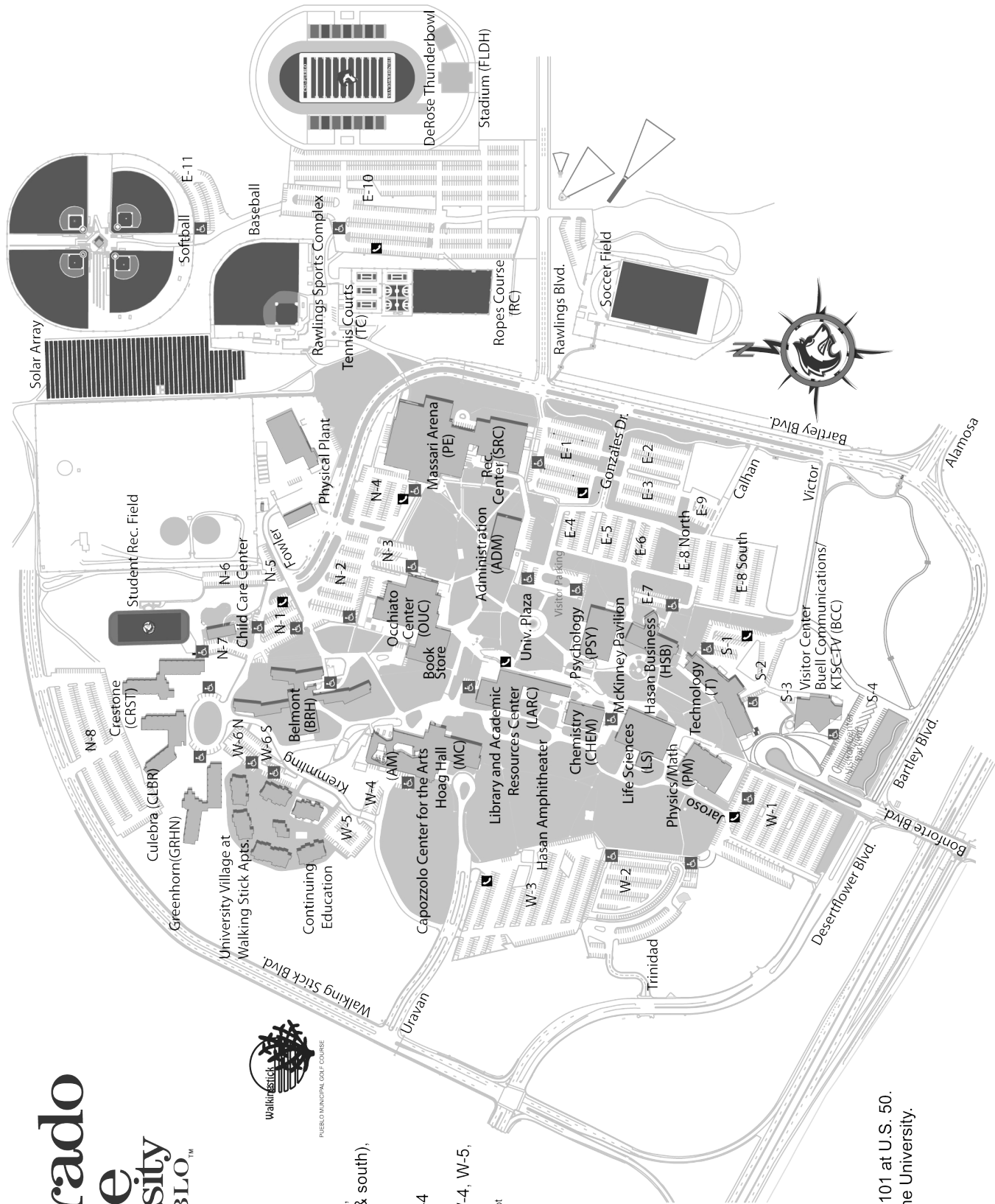**EAST:** E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8 (north & south), E-9, E-10, E-11

SOUTH: S-1, S-2, S-3, S-4

WEST: W-1, W-2, W-3, W-4, W-5, and W-6 (north & south)

*Visitors with permit may park in visitors lot or white lines only.

Emergency Phones

Handicapped

I-25 Exit 101 at U.S. 50. East to the University.

2200 Bonforte Blvd.　•　719-549-2100　•　www.colostate-pueblo.edu

Walking Stick
PUEBLO MUNICIPAL GOLF COURSE

Solar Array

Softball　E-11

Baseball

DeRose Thunderbowl

Stadium (FLDH)

Rawlings Sports Complex　E-10

Tennis Courts (TC)

Ropes Course (RC)

Rawlings Blvd.

Soccer Field

Bartley Blvd.

Physical Plant

Student Rec. Field

Massari Arena (PE)

Rec. Center (SRC)

E-1

Gonzales Dr.

E-2

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Fowler

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Calhan

Victor

Alamosa

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Chemistry (CHEM)

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Kremmling

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(AM)

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Uravan

Trinidad

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DEGREE PROGRAMS

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

COLLEGE OF EDUCATION, ENGINEERING, AND PROFESSIONAL STUDIES

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

Teacher Education Program

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

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

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

Art... BA, BFA
English .... BA
Foreign Language-Spanish .... BA
History .... BA, BS, M.A.
Mass Communications .... BA, BS
Music... BA
Political Science .... BA, BS
Psychology.. BA, BS
Social Science (offered through Continuing Education only).. BA, BS
Social Work ....BSW
Sociology.. BA, BS

COLLEGE OF SCIENCE AND MATH

Biochemistry..MS
    3+2 Joint Degree Program ....BS + MS
Biology ....BS, MS
    3+2 Joint Degree Program ....BS + MS
Chemistry ....BS, MS
    3+2 Joint Degree Program ....BS + MS
Mathematics... BA, BS
Physics.. BS

HASAN SCHOOL OF BUSINESS

Accounting .... BSBA
Business Administration .... MBA
    3+2 Joint Degree Program - Computer Information Systems.. BS + MBA
    3+2 Joint Degree Program - Management ....BSBA + MBA
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 Colorado State 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 University-Pueblo. This list is subject to change.

ALPHABETICAL LIST OF GRADUATE MAJORS/EMPHASIS AREAS

The following is an alphabetical list of graduate majors and their emphasis areas that are available at Colorado State University-Pueblo. This list is subject to change.

MINORS

The following is a list of approved minors available at Colorado State University-Pueblo. This list is subject to change.

CERTIFICATE PROGRAMS

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

HISTORY

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

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

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

MISSION

Colorado State University was established by state law:

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

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

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

CSU-Pueblo offers a wide array of undergraduate degree programs in the humanities, social sciences, sciences and math, education, engineering, nursing, business, and other professional areas. The University's educational focus is grounded in the traditional liberal arts and sciences, and addresses students' immediate and long-term 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, CSU-Pueblo 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 CSU-Pueblo as a small comprehensive, masters granting university. Both universities are committed to excellence and strive to set the quality standards for their types of institutions. Both have excellent undergraduate and graduate programs that serve the citizens of Colorado through teaching, research, and service. Both universities promote civic engagement, freedom of expression, innovation, environmental sustainability, inclusiveness and diversity, integrity and mutual respect, and both are committed to employing a student-centered focus, providing opportunity and access, and being accountable.

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

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

CSU-Pueblo's success in fulfilling its mission to be an educational resource for the state's diverse population is documented by the characteristics of our student body. We have a diverse student body including traditional and non-traditional students, campus-based and community-based 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 CSU-Pueblo 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 5,000-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 Affairs, the Associated Students Government, and dozens of other student clubs and organizations to serve every interest. Concerts, movies, speakers, comedians and stage plays and musical performances are a regular feature at the many venues on campus and a new, artificial turf student recreation field hosts intramural and pickup games of flag football, soccer, lacrosse and more.

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

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

GOVERNANCE

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

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

President is assisted by a University Leadership Team which consists of the Provost, the Vice President for Finance and Administration, Deans, and representatives from the Classified Staff and Faculty Senate, among others.

ACCREDITATION

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

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

AFFIRMATIVE ACTION/EQUAL EMPLOYMENT OPPORTUNITY COMMITMENT

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

Also, the University provides affirmative action to ensure that protected class applicants are employed and that all employees are treated fairly during employment without regard to their membership in any of the aforementioned protected groups, in accordance with the laws of the United States and the State of Colorado. Such action includes, but is not limited to affirmative efforts with respect to employment, promotion, transfer, recruitment, advertising, layoff, retirement, or termination; rate of pay or other forms of compensation and selection for faculty

development activities. The University posts in conspicuous places notices setting forth the provision of its nondiscrimination policy, affirmative action plans and programs, and equal opportunity commitments.

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

For more information please visit www.colostate-pueblo.edu/AffirmativeAction.

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 recently have 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 Associate Vice President for Facilities a verbal report, including a general review of conditions, impending developments, and a recommendation for action. The AVP will then contact the Vice President for Finance and Administration, who in consultation with the President, will make a final decision on closure of the University. If the President cannot be reached within a time frame that allows for a 6:15 a.m. announcement of closure, the Vice President has the authority to make the closure decision.

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 on *View Current Info.* If the University is closed, a message also will be posted on the University's home page at http://www.colostate-pueblo.edu. Closure

notification also will include the Pueblo Transportation Company and any non-law enforcement organizations that are appropriate.

10. Closure decisions impacting on-campus and off-campus 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.

EMERGENCY ALERT SYSTEM

To aid the education of CSU-Pueblo students, faculty, staff, and visitors, the University combines all of its emergency notification systems into a single system concept "CSU-Pueblo ALERT". Regardless of which notification methods or media are utilized, all emergency notifications and warning messages to the recipient come from the CSU-Pueblo ALERT.

CSU-Pueblo ALERT emergency notification and warning system consists of the following communication methods, listed in order of effectiveness (activation and delivery speed, audience reach, etc.):

1. Voice over Fire Alarm in Campus Buildings
2. SMS Text Messaging
3. Bulk Email
4. Pueblo County Sheriff's Office Vehicle Public Address Speakers
5. CSU-Pueblo Radio (REV 89, 89.5 FM)
6. Media Release/Press Conference
7. NOAA Weather Radios
8. CSU-Pueblo Home Page Website, http://www.colostate-pueblo.edu

Activation of the CSU-Pueblo ALERT emergency notification system must be approved by University officials.

The following emergency scenarios and associated CSU-Pueblo Alert messages are pre-approved by University officials and eligible for immediate activation:

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

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 SYSTEM

JOINT PROCLAMATION AGAINST SEXUAL MISCONDUCT

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

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

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

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

BOARD OF GOVERNORS NON-DISCRIMINATION POLICY

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

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

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

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

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

1. Ms. Marjorie Villani - (719) 549-2223

2. Ms. LaNeeca Williams - (719) 549-2210

3. The United States Department of Education
   Office for Civil Rights
   400 Maryland Avenue, South West
   Washington, D.C. 20202-1100
   Phone: (1-800-421-3481)
   Website: www.ed.gov

ADMISSION

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

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

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

ENTERING FRESHMEN

Admission Standards

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

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

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

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

1) The applicant's academic and personal potential to benefit from or contribute to University programs; and

2) The applicant's previous academic record. Students with non-traditional backgrounds are encouraged to apply.

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

Admission Requirements

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

Applicants must submit:

1) A completed CSU-Pueblo application;

2) A $25 application fee (non-refundable);

3) An official transcript of high school records or GED score of a 450 composite; and

4) Scores from either the ACT or the SAT.
   (Not required of applicants who are 23 years of age or older or who have been out of high school five or more years.)

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

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

Application Deadlines

For the best scholarship, registration time, and housing considerations, applicants should apply and be admitted as early as possible. Those still in high school may apply once they have completed six semesters. To be considered for a specific term, all documents required for admission must be received in the Office of Admissions by

the deadline for that term. Transfer students should allow sufficient time to have official transcripts sent from all institutions previously attended.

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

Fall Semester...August 1
Spring Semester ....January 2

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

Higher Education Admission Requirements (HEAR)

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

- Four years of English;

- Four years of mathematics, including Algebra I, Algebra II, Geometry, Trigonometry, Pre-Calculus, Calculus, etc.;

- Three years of natural science, including at least two courses with laboratory work;

- Three years of social studies, including U.S. History or World Civilization;

- One year of foreign language; and

- Two years of academic electives.

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

Advanced Placement

See Credit by Examination (Academic Policies section).

Basic Skills Assessment

The University complies with statewide policies adopted by the Colorado Department of Higher Education (CDHE). Effective fall 2001, every public institution of higher education in Colorado is required to assess the reading, writing, and mathematic skill levels of all first-time, degree-seeking 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

ACT Subscore	SAT Subscore	ACCUPLACER Score
Reading 17	Critical Rdg... 430	Reading Comp....... 80

Skill Area: Writing

ACT Subscore	SAT Subscore	ACCUPLACER Score
English....... 18	Critical Rdg... 440	Sentence Skills 95

Skill Area: Mathematics

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

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 30 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. College credit earned in high school is eligible to count toward a degree at CSU-Pueblo, but cannot classify a student as a transfer student.

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

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

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

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

Transfer 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 Visitor and Transfer Center or at www.goCSUPueblo.com.

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 C- or better are accepted in transfer.

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

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

Credit from an institution without regional accreditation may be accepted by petition for transfer after the student has completed at least one 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.

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. Official transcripts received from other institutions cannot be relinquished.

College Level Examination Program

See Credit by Examination (*Academic Policies* section).

Appeals Process

If a student disputes the **University's evaluation of credits** from other Colorado public institutions, the student must file a written appeal with the 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 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 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.

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

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

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

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

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

DEGREE-PLUS (SECOND BACCALAUREATE DEGREE)

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

INTERNATIONAL STUDENTS

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

1) The official international application for University admission, accompanied by a $30 fee for undergraduate admission or $35 fee for graduate admission; or a $30 fee for English as a Second Language students.

2) Two official transcripts of all work completed either in high school or in college (or the equivalent). One transcript must be in the native language, one in English. Both must show courses taken, grades earned, length of classes and length of school terms. All transcripts must bear the official seal of the issuing institution and must be sent by that institution directly to the Center for International Programs. An explanation of all transcript terminology must be included;

3) Results of an English language proficiency test. **First-time 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 **80** on the Michigan Test of English Proficiency, a minimum band score of **5.0** on the International English Language Testing System (IELTS) test, or completion of the advanced level at CSU-Pueblo's English Language Institute (with ELI Director approval) is required. **Transfer students:** A minimum score of **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 applying after the application deadline for Fall or Spring must also pay the $25 Late Application Fee (non-refundable) in addition to the $25 Application Fee. Students whose previous CSU-Pueblo work resulted in a cumulative grade point average below 2.000 ("C") must also provide a written statement detailing the previous academic difficulties, the student's plans to overcome these difficulties and any other pertinent information to assist the admissions committee in making a decision.

Students, who are re-admitted after an absence of two or more semesters excluding summers, are governed upon readmission by the catalog current at the time of readmission. Any college credit earned more than 10 years before the date of admission or readmission is not applicable toward the degree desired unless it is approved by the appropriate department chair. This policy includes transfer credit previously accepted by CSU-Pueblo. This policy does not apply to general education courses. Any exceptions to the policy must have prior approval from the Provost. Degree-seeking students who have attended another post-secondary institution or have taken 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 whose cumulative CSU-Pueblo grade point average is below 2.000 are eligible for academic renewal. Students who take advantage of the Academic Renewal Policy will not have grade-point averages carried forward upon readmission. Courses with an earned grade of C or better are eligible to count toward graduation. Students must be currently enrolled for academic renewal to be processed. **Academic renewal will not be granted more than once.**

Any college credit earned more than 10 years before the date of readmission is not applicable toward the degree

desired unless approved by the chair of the department offering the course(s) [or equivalent(s)].

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

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

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

NON-DEGREE STUDENTS

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

Guest Student

Applicants who wish to register as a guest without degree-seeking 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 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 and high school/University approved agreement forms, approved by their high school counselor, principal, parents and district 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 this program is available in the CSU-Pueblo Office of Admissions and participating high schools.

The University also offers a Senior-to-Sophomore (STS) program by agreement with various high school districts. High school students in this program are afforded the opportunity to study in university level courses while remaining in their high school classrooms and are considered unclassified students by the University. Students must submit an application for admission, transcript of their high school record and ACT or SAT scores. Those STS students who are in their senior year are given consideration for admission as regular first-time

students for the fall semester following their high school graduation. Students interested in this program are encouraged to seek information from their high school guidance counselor or from the University's Office of Continuing Education at 719-549-2316.

Senior Citizens

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

RESIDENCY CLASSIFICATION

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

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

- Obtain a "Petition for In-State Tuition Classification in the Admissions and Records Office; and

- Submit a completed petition by the deadline.

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

Qualified Individuals

Parent Petitioners

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

Other Qualified Individuals

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

- 22 years of age or older

- Married

- Emancipated

- A graduate student

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

Emancipation must be proven in the following way:

- Parents or other individuals must no longer support the minor and make no provision for support. Support includes gifts, trust funds, loans, and assets established by parents or someone other than yourself on your behalf.

- Parents must no longer claim the minor on their federal and state income tax returns.

- If the minor takes out a loan, they must do so without a parent co-signer. In addition, the loan must not be the student's major source of support.

- The minor must document that they are independently able to meet all financial obligations without any financial help from any other individual.

Examples of financial obligations may include:

- Tuition and fees

- Rent and food

- Medical expenses, including health insurance

- Vehicle expenses, including insurance

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

Court Appointed Legal Guardian

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

RESIDENCY REQUIREMENTS

Domicile

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

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

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

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

    - Lease agreement

    - Rent receipts

    - Home ownership

    - Notarized statement from a landlord

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

    - Colorado driver's license or valid Colorado ID

    - Colorado motor vehicle registration

    - Permanent, full-time, off-campus employment

- Colorado voter registration

- Change in permanent address on all pertinent records

- Payment of Colorado state income taxes as a Colorado resident

- Withholding of Colorado state taxes from wages

- Ownership of residential property in Colorado

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

- Failure to file a Colorado state income tax return

- Failure to have Colorado state income taxes withheld from your wages

- Filing a Colorado state income tax return as a non-resident

- Failure to obtain a Colorado driver's license or Colorado ID

- Maintenance of a home in another state

- Prolonged absence from Colorado

- Vehicle you operate is registered in another state

- Residing in another state between academic terms or when not enrolled as a student

- Any other factor unique to the individual which tends to imply your permanent home and legal residence is in another state

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

TUITION AND FEES

Tuition and fee rates and posted payments are on-line at http://www.colostate-pueblo.edu. Click TWOLF Student Portal and then log into PAWS to view billing information. 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.college-assist.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
- 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.colostate-pueblo.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) Complete a **Free Application for Federal Student Aid** (FAFSA) by March 1. Students may apply online at http://www.fafsa.gov.

   The CSU-Pueblo school code is: 001365

2) Complete the CSU-Pueblo Scholarship application by March 1. Students may apply online at http://www.colostate-pueblo.edu/sfs/scholarships.

3) Students can view their application status and other required documents on CSU-Pueblo's Personal Access to Web Services (PAWS). Once all required information is received, students will receive a financial aid award offer, which can be viewed through the PAWS account.

Students may **not** receive financial aid if they are:

1) Not enrolled in a degree-seeking program;

2) On financial aid suspension 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

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

Cumulative Grade Point Average (GPA)

2.0 for undergraduate programs, 3.0 for graduate programs

Completion Percentage (Pace)

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

Course repetition: Students are allowed to repeat a course and have it count toward enrollment for financial aid eligibility only once. Each attempt at the course, however, will count toward a student's pace, and all prior attempts with lower grades will count as unsuccessful credit hours attempted.

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

Incompletes: At the time of evaluation (the end of each period of enrollment), Incompletes (grade of "IN") do not

affect a student's cumulative GPA for SAP, but count as credit hours attempted toward both pace and maximum time frame. Students with grades of Incomplete which become new letter grades prior to or during a subsequent period of enrollment and that may affect financial aid eligibility for that period of enrollment can contact Student Financial Services for further evaluation.

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

Maximum Time Frame

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

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

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

All students enrolled at CSU-Pueblo are evaluated for SAP at the end of each period of enrollment, after the Records office has released official grades. Students can find their SAP status within the Financial Aid menu on PAWS. Listed here you will find each status and definition:

- **Eligible** – Student is eligible for financial aid. This category may include students with no SAP issue at all, students who have appealed successfully and have successfully completed their Probation period of enrollment, students who have successfully completed their Probation period of enrollment and are following their Academic Plan, and students who have met SAP after being Ineligible previously.

- **Warning** – Failure to make SAP, but student is financial aid eligible for one more period of enrollment and must make SAP by the end of that period of enrollment or financial aid eligibility will be Suspended. Warning status is not appealable.

- **Suspended** - Failure to make SAP after a Warning period, but student is eligible to appeal. If the appeal is approved, the student can continue financial aid eligibility for another period of enrollment under a Probation status. Students may also choose not to appeal and attempt to regain financial aid eligibility by meeting SAP while paying out of pocket (without any financial aid).

- **Probation** - Failure to make SAP, but appeal is approved and student is financial aid eligible for one more period of enrollment, or possibly more if

following required Academic Plan (which may include documentation requirements not directly related to academic performance).

- **Ineligible** - Failure to make SAP and/or failure to follow required Academic Plan. This status also applies to appeals that are not approved - the student is not eligible for financial aid until cumulative SAP standards are met and may not appeal.

Appeal Procedure

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

- Have student printed name, PID, daytime contact information, and signature;

- Have Academic Advisor name, department, and contact information;

- Include information describing why SAP minimum standards have not been met and how the situation has changed so that SAP will be met at next evaluation;

- Detail any mitigating circumstances, including supporting documentation from a 3rd party (e.g., police reports, detailed hospital bill or physician's statement, death certificate, etc.);

- Include enrollment plans for next period of enrollment (e.g., number of credit hours, change in major, Academic Improvement Plan details, any other academic-related documentation, etc.); and

- Be complete and turned in to Student Financial Services by the following priority deadlines for each period of enrollment:

  - July 1 for Fall semester

  - Monday before classes begin for Spring semester

  - June 1 for summer

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

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

Academic Plans

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

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

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

OFFICIAL WITHDRAWAL POLICY

Students who totally withdraw from the University, for any reason, and it is passed the drop period must initiate the Official Withdrawal process by contacting Student Academic Services in the Psychology Building, Room 232. A withdrawal from the University is not considered official until the following three required steps are completed:

1) Students must obtain an Official Withdrawal Form from Student Academic Services.

2) Students must speak with a Financial Aid Counselor in Student Financial Services.

3) Students must turn in the Official Withdrawal Form with all required signatures from the above named offices to the Records Office to finalize the withdrawal.

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

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

Students who totally withdraw from the University after the drop period through 60 percent of the semester will have their tuition prorated. A federal formula is used to determine the amount of federal financial aid earned by the student, which will be calculated for students who withdraw within 60 percent of the semester based on the percentage of the semester completed. If the student received less assistance than the amount earned, the student may be able to receive those funds. If the student received more assistance than earned, the excess funds must be returned. The amount of federal financial aid unearned will be deducted from the adjusted tuition amount credited to the student's account; however, there may be additional institutional charges that were not covered by federal financial aid and will be reflected in the total amount owed by the student. A calculation which reflects the tuition adjustment and the return of federal financial aid is provided to students via letter who complete an official withdrawal after the return of the federal aid has been processed. Students may use the following calculation to estimate the amount of Title IV aid he or she earned prior to the withdrawal date.

# of days student completed*/total # of days in period of enrollment = percentage of aid earned

*Scheduled breaks of five or more days will be excluded from calculation.

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

Students who complete Official Withdrawals within 60 percent of the period of enrollment and did not receive

federal financial aid will have their tuition prorated based on the day the Official Withdrawal was initiated by the student through the office of Student Academic Services.

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

FINANCIAL AID PROGRAMS

GRANTS

All grants are listed on our webpage: http://www.colostate-pueblo.edu/sfs/grants. 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 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 work study. Students are selected for the program if qualifications are met and if funds are available. Generally students must demonstrate financial need, but the University is allowed to award a portion of the Colorado work study funds to students who have little or no financial need.

Federal Work Study

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

Students must complete the Free Application for Federal Student Aid (FAFSA) to determine eligibility for work study. Students are selected for the program if qualifications are met and if funds are available. Students may work on 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 being processed by CSU-Pueblo, the applicant must complete the financial aid application process.

Federal Perkins Student Loan

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

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

- $5,500 a year as an undergraduate if they are enrolled in a degree program, leading to a bachelor's degree;

- $8,000 a year as graduate students enrolled in a master's degree program;

- $20,000 aggregate if they are undergraduates working toward a bachelor's degree; or

- $40,000 aggregate for graduate or professional study (total includes any amount borrowed under Federal Perkins Loan or NDSL for undergraduate study).

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

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

Federal Direct Loans

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

Direct loans are either subsidized or unsubsidized. A **subsidized** loan is awarded on the basis of financial need. The federal government pays the interest while the student is in school 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 Direct Loan Program is intended solely to aid students pursuing a degree in higher education. Students should borrow only the amount they believe is necessary to pay for educational costs. Keeping the amount of a loan at a minimum will ease repayment.

Student Loan Amounts

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

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

Annual Loan Limits for Direct Loans

	Dependent Undergraduate Student	Independent Undergraduate Student
1st Year	$5,500	$9,500—only $3,500 may be subsidized
2nd Year	$6,500	$10,500—only $4,500 may be subsidized
3rd & 4th Years	$7,500	$12,500—only $5,500 may be subsidized
Maximum Total Debt Allowed	$31,000	$57,500—only $23,000 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 Direct Loan Distribution

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

Federal Direct Parent Loan for Undergraduate Students (PLUS)

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

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

SCHOLARSHIPS

To be considered for any University grant and scholarship aid, students must complete the University Scholarship Application. Also, 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.colostate-pueblo.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.

<u>Impact on Financial Aid</u>

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 Veterans Education Benefits Office in the Administration Building, Room 201, telephone, (719) 549-2910. Please allow at least two months for processing time.

BUREAU OF INDIAN AFFAIRS

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

CAMPUS LIFE, STUDENT ENGAGEMENT AND DEVELOPMENT

STUDENT AFFAIRS

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

Vision

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

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

STUDENT ENGAGEMENT, LEADERSHIP, AND INVOLVEMENT PROGRAMS

ASSOCIATED STUDENTS' GOVERNMENT

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

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

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

RESIDENCE LIFE AND HOUSING

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

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

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

Live-in Requirement

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

Freshmen students required to live in University housing will be defined as having fewer than 30 credit hours. Credits taken concurrent with high school and/or credits attained through Advanced Placement (AP) examination, CLEP, International Baccalaureate or similar programs do not apply towards housing requirement.

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

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

Residence Hall Association

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

Belmont Residence Hall

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

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

Crestone Residence Hall

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

Culebra Residence Hall

Culebra Hall opened in Fall 2010. The residence hall has four floors of mostly suite-styled student rooms, totaling 235 beds, a commons/lounge area with adjacent small study rooms, laundry, mailroom, and a late-night food venue offering coffee drinks, soups, snacks, sandwiches, and pizza. A glassed-in lounge will be located on each floor. There are also card access security entrances to provide a safe living and learning environment. This building has wireless internet access.

Greenhorn Residence Hall

Starting in Fall 2010, this new residence hall offers four floors of mostly suite-styled student rooms totaling 263 beds with a commons/lounge area and adjacent small study rooms, laundry, mailroom, warming kitchen, fully-equipped technology classroom seating 24, and a computer "cyber lounge" available to residents. A glassed-in lounge is located on each floor. There are also card access security entrances to provide a safe living and learning environment. This building has wireless internet access.

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

Application Information

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

Contract Board Policies

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.

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.

The apartments offer a campus high-speed Internet access in each bedroom and common area, as well as premium cable TV in each bedroom and the common area. Each unit features individually controlled heating and air-conditioning. Each unit is two-stories. Two floor plans are available each consisting of 4-bedrooms and 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 four private locking bedrooms and a semi-private locking vanity and bathroom on each floor. Bedrooms range in size from 108 square feet to 124 square feet with large closets. A private phone is available at additional cost in each bedroom. This student community also features a spacious and inviting clubhouse, an on-site office with student and professional staff, an outdoor basketball court, park benches, and restricted on-site parking.

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/

Housing for Students with Families

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

STUDENT RECREATION
http://www.colostate-pueblo.edu/sr/

Student Recreation and its affiliated programs offer comprehensive and vibrant experiential opportunities that enhance students' fitness and wellness, knowledge, personal skills, and enjoyment by providing:

- Opportunities for a variety of activities that may contribute to individual physical fitness and wellness.

- Opportunities for organized, cooperative, and competitive activity.

- A medium through which students can learn and practice leadership, management, program planning, and interpersonal skills.

- Access to quality facilities, equipment, and programs.

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

The Student Recreation Center facilities:

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

Student Recreation Center Programs
http://www.colostate-pueblo.edu/sr

Students are encouraged to regularly check the SRC website for updated information including: intramural events and deadlines, fitness schedules, pool schedules, and calendars for upcoming trips and events.

Intramural Sports
(719) 549-2665 or email intramurals.sr@colostate-pueblo.edu

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

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

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

A variety of fitness classes are offered for participants wanting to get a great cardio workout, to burn some fat, and/or tone their bodies. Classes are non-competitive. Participants are encouraged to work at their own level. Classes are taught by providing move and routine options to accommodate different audience skill levels (low, intermediate, and advanced).

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

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

Outdoor Pursuits
(719) 549-2091 or email sr.outdoorpursuits@colostate-pueblo.edu

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

Outdoor Programs/Trips

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

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

Challenge Course/Team Development Programs

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

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

Rock Climbing Wall

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

Equipment Rental

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

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

DIVERSITY RESOURCE CENTER

Mission

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

Diversity

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

Academic Support

Intellectual growth is important outside the classroom; therefore, activities and programs involving academic and

student services departments are scheduled throughout the 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 cultural and diversity workshops and programs to develop an awareness of the diversity in our global society.

Leadership

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

Facilities, Technology, and Equipment

The DRC is located in the lower level of the Occhiato University Center, Room 031, 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 8:00 a.m. until 8:00 p.m. Monday through Thursday and from 8:00 a.m. until 5:00 p.m. on Friday and is available upon request for the utilization of student organizations, departments, or committees by calling (719) 549-2627.

ORIENTATION

Fall 2011 New Student Orientation will be held Wednesday, August 17 – Friday, August 19, 2011 on campus.

Orientation is the beginning of an ongoing process of introduction to the curricular and co-curricular opportunities available to students at CSU-Pueblo. The purpose of orientation is to facilitate the transition of new and transfer students into the CSU-Pueblo community, prepare students for the institution's educational opportunities and student responsibilities, and provide information to parents and families of new students as they support their students' educational endeavors. The fall orientation is held on the Wednesday, Thursday, and Friday prior to the first day of classes. Specific orientation dates and schedules are posted on the website www.colostate-pueblo.edu/Orientation.

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

STUDENT ACTIVITIES

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

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

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

OSA 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) Weekly Events, (3) Major Events, (4) Student Organizations, (5) Greek Life, (6) Student Leadership Development, (7) Service Learning Opportunities, and (8) Student Experience Appreciation.

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

- Participate in co-curricular out-of-class learning activities;

- Enhance leadership abilities;

- Widen healthy interpersonal relationships;

- Get involved in various productive ways;

- Explore activities in individual and group settings for self-understanding and growth;

- Learn about varied cultures and experiences, ideas and issues, and art and musical forms;

- Design and implement programs to enhance social, diversity, and academic opportunities;

- Design and implement programs that provide intellectual, recreational, community service, and campus involvement opportunities;

- Enable group interests and encourage group activities; and

- Learn about, and use campus facilities and other resources.

OSA is located in the lower level of the Occhiato University Center, Room 002. Please visit the Student Activities website to view all events: http://www.colostate-pueblo.edu/StudentActivites. Contact (719) 549-2151 for more information or to learn how you can get involved with either campus life of join the OSA team.

Student Leadership Experience

The Leadership Program at CSU-Pueblo strives to help plan and organize a comprehensive leadership development program that is designed to enhance the total learning experience for our students. The Leadership Program evaluates student needs and implements programs and activities that facilitate the learning, growth, and development of students and foster leadership, civic engagement, and sense of community. OSA believes that the leadership opportunities provided by membership in fraternal organizations are endless and will be an outstanding part of a student's life during their undergraduate career. The Leadership Program is to provide students with developmental and experiential opportunities that foster leadership and community involvement grounded in values and moral purpose. Through leadership education service learning, advocacy, and volunteerism, students will become active citizens on campus, in their respective communities, and in the workplace.

Along with various workshops and institutes throughout the academic year, OSA collaborates with various entities around campus to provide a Student Leadership Retreat each year. The Student Leadership Experience Retreat is an experiential leadership conference designed for current and emerging student leaders. Students who attend will (1) learn to articulate values, qualities, and skills important to leadership positions; (2) explore their personal leadership identity; (3) develop an expanded awareness of diversity in leadership; and (4) experience leadership by collaborating with other participants to identify and address a campus issue. This conference is open to all CSU-Pueblo students and space is limited to only 100 students per year. Retreats in the past have been held at the historic Stanley Hotel in Estes Park, Colorado and the Winter Park Mountain Lodge in Winter Park, Colorado. Other leadership institutes include a Night of Leadership with Brent Scrapo, Women's Leadership Institute, Space Exploration Seminar, and many others.

Greek Life

The Office of Student Activities is committed to enhancing Greek Life and Greek students through their fraternal experience to build a Greek community where students can have a positive collegiate experience. OSA believes that the leadership opportunities provided by membership in fraternal organizations are endless and will be an outstanding part of a student's life during their undergraduate career. Greek Life at CSU-Pueblo strives to be a pre-eminent fraternal system that promotes leadership development, academic success, civic engagement, and creation of fraternal bonds. Greek Life is to build an inclusive Greek community and enhance the collegiate experience by supporting opportunities for siblinghood, leadership, service, and scholarship; and to serve as a liaison among the collegiate chapters, parents, alumni, international organizations, and the University to provide organizational guidance, educational programs, and resources while challenging members to live their fraternal values.

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

Non-Traditional Students Center

Non-Traditional Students Center (NoTs Spot) 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 lower level of the Psychology building.

Distinguished Speakers Series

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

Artists, performers, lectures, sponsored by the Distinguished Speakers Series include: Danny Glover, Dinesh D'Souza, Naomi Tutu, Dolores Huerta, Dr. John Corvino, Robin Givens, John Quiñones, Joel, Cohen, 3oh!3, Sean Kinston and Gym Class Heroes, and many more. For more information, contact the Office of Student Affairs at (719) 549-2586.

Student Organizations Services

CSU-Pueblo students have opportunities to take part in the activities of a number of various student organizations (StudOrgs). Students can search for various StudOrgs and join them virtually through www.CSUPueblo.OrgSync.com Memberships of most StudOrgs are open to the campus community. Students interested in starting a new recognized StudOrgs must first find a faculty or staff member willing to advise the organization and four other students interested in the same group. All students then must fill out a StudOrg Registration Profile online at http://www.csupueblo.orgsync.com. 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://www.colostate-pueblo.edu/StudentActivities/StudentOrganizations/

Academic Organizations

- Associated General Contractors
- Association of Computing Machinery
- Athletic Training Club
- Automotive Booster Club Jr B-3
- English Club
- English Graduate Interactive Society
- HSB Accounting Club
- Institute of Electrical and Electronics Engineers
- Institute of Industrial Engineering

- Math and Physics Club
- Medical Science Society
- Past Masters – History Association
- Physical Educators Club
- Political Science Club
- Psi Chi
- Psychology Club
- Society of Mexican American Engineers & Scientists
- Southern Colorado Association of Nursing Students
- Teacher Education Association
- Tempered Steel Literary Magazine

Campus-Life Organizations

- Anime Club
- Art Club
- Bold and Beautiful Educated Sisters
- Pack Leaders
- Soul Steppers Drill Team

Cultural-Organizations

- Autonomy Martial Arts
- Benefiting the Education of Latinas in Leadership, Academics and Sisterhood
- Black Student Organization
- MEChA – Movimiento Estudiantil Chicano de Aztin
- PRIZM: Gay, Lesbian, Bisexual, Transgender, Ally Alliance
- Voices of Empowerment

Greek Letter Organizations

- Alpha Sigma Alpha Sorority
- Greek Council
- Kappa Sigma Fraternity – Mu Alpha Chapter
- Lambda Chi Alpha Fraternity

Honor Societies

- Sigma Tau Delta

Specific Interest Organizations

- Amnesty International Club
- Campus Crusade for Christ
- Catholic Campus Ministry
- Christian Challenge
- Fellowship of Christian Athletes
- Pueblo Young Life
- Residence Hall Association
- The Underground
- Thespians Anonymous

SERVICES, SUPPORT, AND STUDENT DEVELOPMENT PROGRAMS

CAREER CENTER

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

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

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

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

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

STUDENT COUNSELING CENTER

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

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

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

The 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.

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

ALCOHOL AND OTHER DRUGS (AOD) PREVENTION EDUCATION PROGRAM

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

The AOD Coordinator's role is to develop, lead and coordinate campus-wide drug and alcohol prevention 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 other drugs prevention education programs and workshops for students. Services may be accessed by calling University Health and Counseling Services at (719) 549-2830.

TRiO EDUCATIONAL OPPORTUNITY CENTER (EOC)

EOC is a federally funded TRiO 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 CSU-Pueblo students, potential students as well as 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.

For services on the CSU-Pueblo campus, students and community members can call (719) 549-2557. The central office is located on the CSU-Pueblo campus, Room 365 in the Library and Academic Resource Center (LARC). Satellite offices are located at CSU-Pueblo's Citadel Center, and on community college campuses in Pueblo, Colorado Springs, Lamar, La Junta, and Trinidad. To access services or for more information, call (719) 549-2457 or toll free (877) 302-4433 or visit our website: http://www.sceoc.net.

COLLEGE ASSISTANCE MIGRANT PROGRAMS (CAMP)

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

Services:

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

Eligibility:

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

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

STUDENT JUDICIAL AFFAIRS

The Dean of Student Affairs, or his/her designee, is responsible for promoting observance of the *Student Conduct Code*, 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 Affairs or his/her designee may be appealed to the Campus Appeals Board, the highest hearing and appeal board for non-academic 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* 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.

The most recent version of the Student Conduct Code can be accessed via the University's website at http://www.colostate-pueblo.edu/StudentLife/StudentJudicialAffairs/ For your convenience, portions of the 2009-2010 Student Conduct Code are reprinted below.

Conduct – Rules and Regulations

The University expects the members of its community to observe the laws of the City of Pueblo, the State of Colorado, the United States of America and to respect other members of the community, their rights, and their privileges. Students, guests, faculty, and staff members, upon entrance to the University neither gain nor lose any of their rights or responsibilities of citizenship. As a community, the University has the obligation to establish those rules and regulations that best serve and protect its integrity as an institution of higher learning.

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

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 CSU-Pueblo 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 Affairs 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 CSU-Pueblo 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.

Rules and Regulations Specific to Student Organizations

Societies, clubs, or similar organized groups in or recognized and/or chartered by the University are subject to the same *Student Conduct Code* as those for individuals in the community.

1) Violations of any rules, contracts, or agreements governing recognized student organizations, sport clubs, Greek organizations, alcohol use, travel, solicitation, risk management, or hosting of events on or off University property, and participation in or attendance at athletic or other authorized special events. Violations of any University policy, rule, or regulation that is published in hard copy or available electronically on the University website.

2) Hazing, which includes any act that endangers the mental or physical health or safety of a student or that destroys or removes public or private property for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in a group or organization. The express or implied consent of the victim will not be a defense. Apathy or acquiescence in the presence of hazing is not neutral; they are violations of this rule.

Violations of Law and Colorado State University-Pueblo Discipline

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 Affairs 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.

Disciplinary action will not be subject to challenge on the grounds that civil criminal charges involving the same incident have been dismissed, reduced, or are in progress.

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 Nurse Practitioner or Nurse. Students, 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.

TRiO STUDENT SUPPORT SERVICES

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

- Academic action planning,
- Peer tutoring (one-on-one, group, and drop-in).
- Academic, career, financial literacy, and graduate school counseling.
- Financial Aid advisement.

- College Success Course.

- Supplemental instruction in historically difficult courses.

- Academic success seminars.

- Educational resource center and study room.

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

- Be enrolled or accepted for enrollment at CSU-Pueblo as an undergraduate student,

- Be a low-income student, and/or

- Be a first-generation student, and/or

- Be a student with a documented /diagnosed disability,

- Meet the academic criteria as established by the TRiO SSS Project, and

- Be a citizen, national, or permanent resident of the U.S.

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

TRiO UPWARD BOUND

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

Services include:

- Year-round tutoring on a weekly basis at service area school sites

- Six-week Summer Residential Program at CSU-Pueblo

- Six week Summer Bridge (college preparation) Residential Program at CSU-Pueblo

- Service learning and leadership development

- Social and cultural activities

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

TRiO VETERANS UPWARD BOUND

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

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

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

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

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

Classes are offered in the morning and evening.

Please call to get complete information on how Veterans Upward Bound can benefit you or visit our website: http://www.colostate-pueblo.edu/StudentLife/TRIO/VeteransUpwardBound/Pages/default.aspx

VUB Contact Information:

- Colorado State University-Pueblo
  2200 Bonforte Blvd,
  Library and Academic Resource Center, Room 374
  Pueblo, Colorado 81001-4901
  Phone: (719) 549-2824
           (719) 549-2875
  Fax: (719) 549-2914

- Pueblo Community College
  Phone: (719) 549-3077

- Pikes Peak Community College
  Phone: (719) 502-4545

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
- Video and photographic images of students with the exception of the official CSU-Pueblo identification photograph
- Other previous educational agencies or institutions attended

A student, by the end of the second week of classes, 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 Affairs. 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 Affairs who may initiate additional disciplinary action. A student may appeal a grade through the Academic Appeals Board. The Dean of Student Affair'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 laws also prohibit all forms of disruptive or obstructive behavior in academic areas during scheduled periods or any action which would disrupt scheduled academic activity. Use of classrooms and other areas of academic buildings during non-scheduled periods are permitted only in accordance with University practices. Anyone in unauthorized attendance or causing a disturbance during scheduled academic activity may be asked to leave. If a person refuses such a request, he or she may be removed by 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.

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.

CATALOG REQUIREMENTS

Students may graduate under the catalog requirements for the year in which they are first enrolled, provided they complete graduation requirements within a continuous period of no more than 10-years. If a student withdraws or is withdrawn for any reason from the University and is subsequently readmitted after an absence of two or more semesters, re-admittance will be governed by the catalog

current at the time of readmission. Any exceptions to the policy must have prior approval from the Provost. Students should obtain and keep a copy of the catalog under which they enter or are readmitted. Students may also elect to follow any subsequent catalog.

TIME LIMITATION ON CREDIT

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

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 non-degree 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.

Senior Citizen

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

FULL-TIME / HALF-TIME ENROLLMENT STATUS

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

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

Fall/Spring Semesters
Undergraduates
Full-time	12 or more credits
Half-time	6-11 credits
Less than half-time	Below 6 credits

Graduate Program
Full-time	9 or more credits
Half-time	6-8 credits
Less than half-time	Below 6 credits

Summer Session
Undergraduates
Full-time	6 or more credits
Half-time	3-5 credits
Less than half-time	Below 3 credits

Graduate Program
Full-time	6 or more credits
Half-time	3-5 credits
Less than half-time	Below 3 credits

You may print an Enrollment Verification Certificate online through PAWS or visit the Records Office for certification of enrollment status and term(s) of attendance. (Please note that the above schedule for enrollment status may differ from the full-time/half-time schedule as recognized by 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 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+		1.33
D	(Poor)	1.00
D-		0.67
F	(Failure)	0.00
S	(Satisfactory)	*
U	(Unsatisfactory)	**
IN	(Incomplete)	**
W	(Withdrawal)	**
WN	(Administrative Withdrawal or Nonpayment)	**
NC	(No Credit—Audit)	**
IP	(In Progress)	**

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

** Credits not used to compute grade-point average and not counted toward graduation.

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

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

S Available only in certain approved courses.

U Available only in certain approved courses.

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

IN The grade of IN is recorded at the end of the 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 by the Provost's Office.

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 2.000** 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) unless they successfully appeal their suspension by the appeal deadline (see Appeal Process for Academic Suspension below).

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

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

Students on Academic Suspension who stay away from the University 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 to Student Academic Services. The Appeal Letter must address two issues: (1) why the Academic Suspension is being appealed, and (2) what the student will do to make an improvement in academic performance.

The deadlines for Appeal Letters requesting Conditional Reinstatement are:

- Subsequent fall semester—the 2nd Monday in June

- Subsequent spring semester—the 3rd working day of January

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

CLASS HOURS AND CREDIT HOURS

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

COURSE LOADS AND OVERLOADS

Enrollment in more than 18 credit hours in a given 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 25 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 generally be granted University credit as well as advanced placement; scores of 3 are not accepted in some subjects.

CSU-Pueblo credit is awarded and posted on the transcript without a grade, is counted toward graduation, and may be used to fulfill specific requirements. For more information, please contact the Visitor and Transfer Center.

Please refer to the Advanced Placement (AP) Equivalency Chart that shows the specific courses and credit to be awarded based on score(s) on the AP examination(s) located at the end of the *Academic Policies* section.

2) College Level Examination Program

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

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

3) International Baccalaureate Diploma Program

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

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

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

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

4) Credit by Examination (In-house subject area exams)

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

If a student is successful in challenging a course, the title of the course, credit hours and notation of credit by examination will be recorded on the student's permanent record/transcript. (Unsuccessful attempts are not recorded on the transcript.) The credit hours earned by examination do NOT count in the student's load for the 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 grade-point 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 CSU-Pueblo, 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 CSU-Pueblo and then transfers the course from another institution, the credit and grade points from CSU-Pueblo will remain part of the cumulative hours and grade point average. Duplicate credit will not be granted.

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

INDIVIDUAL COURSES WHICH MAY BE REPEATABLE FOR CREDIT

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

CLASS SCHEDULE CHANGES

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

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

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

Adding Courses/Late Add Policy

Students are allowed to add full-term courses without instructor approval only during the first full week of a regularly scheduled semester. Students may add full-term courses after the first week of a regularly scheduled semester only with the instructor approval and payment of a late add fee.

Addition of Independent Study and Continuing Education

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

Dropping Courses

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

ADMINISTRATIVE DROP FOR NON-ATTENDANCE

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

WITHDRAWAL FROM A COURSE

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

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

FACULTY INITIATED STUDENT WITHDRAWAL

Under certain specific circumstances, a faculty member or the University may withdraw a student from a course or courses. The circumstances are either A or B below.

(A) Faculty may withdraw a student from a course for non-attendance if the student has never attended class through the end of the drop period. The course will be removed from the student's transcript and no grade will be issued. Withdrawal forms must be received by the Records Office by 5:00 pm on the last day of the drop period.

(B) Faculty may withdraw a student for a designated number of absences or for any other reason as stated in the course syllabus with the student's signature acknowledging the withdrawal on the course withdrawal form. In the event that faculty efforts to contact a student concerning the withdrawal are unsuccessful, the signature of the department chair

(or Dean if the Department Chair is the instructor of the course) acknowledging the withdrawal may be substituted for the student signature. The student will receive a grade of W for the course. Exceptions to the requirement of a student or department chair signature may be granted to programs by the Provost.

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

WITHDRAWAL FROM THE UNIVERSITY

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

After the end of the drop period, students who are planning to withdraw from *all* courses and leave the University for any reason **must** file a withdrawal form with Student Academic Services (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

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

reviewed and a decision is made, the student will be notified of the outcome by mail. If a student chooses not to share such information, the Student Academic Appeals Board will decide the case based on the information available.

Examples of reasonable requests for retroactive withdrawal include:

1) Death of immediate family member

2) Serious personal/family problems

3) Unexpected deployment or relocation

4) Diagnosed physical or mental condition/illness

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

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

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

Military Withdrawal

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

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

EXPERIENTIAL CREDIT COURSES

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

CREDIT FOR LIFE EXPERIENCE

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

1) The experience must be directly similar to the content of internships, field courses and/or laboratory courses in the regular curriculum;

2) The student must describe in writing the nature of the experience and what he or she learned through it;

3) The experience and learning also must be documented by the student's on-the-job supervisor. Documentation must include a detailed account of the nature, frequency and duration of the duties; and

4) A paper integrating the experiences with subsequent or concurrent classroom instruction must be submitted and approved.

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

TRANSCRIPTS OF CREDIT

Official transcripts are issued by the Records Office at the **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, International mail, and faxing).

All accounts with Colorado State University-Pueblo must be settled before an official transcript can be issued. Transcripts are processed as rapidly as possible and are usually issued within five working days from the date the signed request is received in the Records Office. Students should allow extra time for issuance near the end of 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. CSU-Pueblo does not accept e-mail or telephone transcript requests.

Faxing of Transcripts

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

How to Order a Transcript

Signed transcript requests should include the following information:

- Student's full name (including maiden or other name if applicable);

- Student's current address and phone number;

- Student ID number;

- Date of birth;

- The last term the student was enrolled at CSU-Pueblo;

- 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;

- The student's signature (this provides CSU-Pueblo with the necessary authorization to release the transcript to the designee; and

- Payment method.

NOTES:

- Transcripts do **not** include Upward Bound, GED, ACT, SAT, GRE or college class rank information.

- If someone other than the individual named on the transcript has been authorized to pick up the document in person, they must provide a signed release from the person named on the transcript.

Payment of Transcripts

- If payment is to be made by credit card, please provide type (VISA, MasterCard or Discover), credit card number, expiration date, 3-digit CVV code on back of card, name of card holder, address of card holder and daytime phone number.

- If the order is for a faxed transcript, the following information is also needed:

  1) The fax number and name of the person to whose attention the transcript is to be sent.

  2) The name and address to which the subsequent official, hard copy transcript will be mailed.

GRADUATION PLANNING SHEETS

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

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

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

GRADUATION LIST

The graduation list is prepared each term by the Records Office from the Graduation Planning Sheets. Faculty Senate will review and recommend the list to the President during or before 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 in early March—changes, 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.

GRADUATION WITH DEPARTMENTAL HONORS

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

CLASS RANK

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

DIPLOMAS

Diplomas are dated and awarded to graduating students each semester (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 the Library and Academic Resources Center, Room 267.

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

Registration

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

Change of Address

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

Immunization Requirement

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

Proof of immunity consists of:

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

- Mumps–one dose of live mumps vaccine administered no sooner that four days before the first birthday and a second dose of live mumps vaccine

administered at least 4 weeks after the 1st dose or a blood test showing immunity to mumps.

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

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

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

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

UNDERGRADUATE PROGRAMS

DEGREE REQUIREMENTS

Candidates for the baccalaureate degree must satisfy institutional and general education requirements, as well as specific requirements for a major. 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 CSU-Pueblo. 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 091, 098, 099, RDG 099).

2) Students must successfully complete a minimum of 40 credit hours in upper-division courses (numbered 300-499). Upper division credit may be earned only through a four-year institution.

3) A minimum of 60 semester hours must be earned from a four-year institution.

4) A minimum of 30 semester hours of credit (as stated in the program of the major) must be earned in residence (courses taken from Colorado State University-Pueblo) with a minimum grade point average of 2.000 for all resident hours attempted. (Both on-campus and continuing education for-credit courses are considered resident credit.)

5) For degree purposes, CSU-Pueblo accepts a maximum of 60 semester hours from community or junior colleges.

6) For degree purposes, CSU-Pueblo accepts a maximum of 90 semester hours from other four-year institutions.

7) Of the last 30 semester 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. Neither emphasis areas or tracks are printed on the diploma.

MINOR REQUIREMENTS

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

DOUBLE (SECOND) MAJOR

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

DOUBLE (CONCURRENT) DEGREES

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

DEGREE-PLUS (SECOND BACCALAUREATE DEGREE)

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

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

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

BACHELOR OF ARTS DEGREE: FOREIGN LANGUAGE REQUIREMENT

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

1) Completion of the second 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.

Upon completion of general education courses, students will

- Use the English language to communicate with clarity, coherence and persuasiveness, demonstrating critical analysis, logic, precision and rhetorical awareness. (Communication)

- Identify, analyze and evaluate arguments and sources of information to make informed and logical judgments, to arrive at reasoned and meaningful arguments and positions, and to formulate and apply ideas to new contexts. (Critical Thinking)

- Articulate the nature of a multicultural society and recognize the role of aesthetic awareness, foreign language skills, cultural and social perspectives or human and institutional systems of the past and present. (Diversity and Social Responsibility)

- Clarify and evaluate their own values and ethical conduct and analyze the values and ethical conduct of others. (Personal Values and Ethics)

- Apply numeric, symbolic and geometric skills to formulate and solve quantitative problems. (Quantitative Reasoning)

- Apply the scientific method, laboratory techniques, mathematical principles and/or experimental design. (Scientific Reasoning)

- Identify and evaluate wellness principles, including mental, emotional and physical health, needed to make informed choices. (Wellness and Well-Being)

The general education requirement for graduation includes a total of 35 semester credits in two categories:

Skills Component .... 9 credits
Knowledge Component .... <u>26 credits</u>

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 CSU-Pueblo.

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) .... <u>3 credits</u>

TOTAL .... 9 credits

A.   Written Communication

Take **each** of the following courses:

ENG   101   Composition I .... 3 credits
ENG   102   Composition II .... 3 credits

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
              Geometry I .... 5 credits

MATH   156   Introduction to Statistics............ 3 credits
MATH   221   Applied Calculus: An Intuitive
                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 courses with labs) ....<u>8 credits</u>

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.

<u>Note:</u>   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*   Introduction to Comparative
                Linguistics *(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)*

Foreign Language
  FRN   101*   Beginning French I *(CC)*
  FRN   102*   Beginning French II *(CC)*
  FRN   201   Intermediate French I *(CC)*
  FRN   202   Intermediate French II *(CC)*
  GER   101*   Beginning German I *(CC)*
  GER   102*   Beginning German II *(CC)*
  GER   201   Intermediate German I *(CC)*
  GER   202   Intermediate German II *(CC)*
  ITL   101*   Beginning Italian I *(CC)*
  ITL   102*   Beginning 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)*

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
SOCSC   209*   African American Studies *(CC)*
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	181/L	College Biology I/Organismal Bio with Lab
BIOL	182/L	College Biology II/Cellular Bio with Lab
BIOL	201/L	Botany with Lab
BIOL	202/L*	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
GEOL	114/L	Oceanography with Lab
PHYS	110/L	Astronomy with Lab
PHYS	140/L	Light, Energy and the Atom with Lab
PHYS	201/L	Principles of Physics I with Lab
PHYS	202/L	Principles of Physics II with Lab
PHYS	221/L	General Physics I with Lab
PHYS	222/L	General Physics II with Lab

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 OF STUDENT LEARNING

Colorado State University-Pueblo is committed to providing quality education and to assuring students gain the knowledge and skills necessary to be successful after they graduate. Assessment of student learning provides the information we need to make improvements in program structure, course content, and pedagogy. The assessment process requires the on-going collection of information from students at the classroom, department, and institution levels. For example, students may be asked to submit examples of their course work, participate in focus groups, and complete questionnaires assessing the quality of academic services. These activities and the information they provide help us determine the extent to which students demonstrate competency in major and minor field of study, in general education, and in graduate school.

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

1) Student learning outcomes for undergraduate major and stand-alone minor programs, and graduate programs are set by faculty and communicated widely;

2) Student learning outcomes are evaluated by faculty using generally accepted best practices in assessment;

3) Faculty and others use assessment information to improve programs as appropriate; and

4) Information about assessment is reported to stakeholders, including the Board of Governors of the Colorado State University System, the Colorado Commission on Higher Education, professional accreditors, and the Higher Learning Commission.

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

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

GRADUATION RATE

Under the Students Right to Know and Campus Security Act of 1990, colleges and universities are required to publish the graduate rate of first-time undergraduate students. This graduation rate is defined as the percentage of first-time undergraduate students who complete their bachelor's degree, at CSU-Pueblo, within six years of their initial enrollment. First-time undergraduate students are defined as full-time, degree

seeking undergraduate students who enroll at Colorado State University-Pueblo with no previous college experience.

The University's average graduation rate for the most recent 3-year average of entering cohorts is 32%, 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.

Advanced Placement (AP) – Equivalency Chart 2011-2012

AP Exam	Score	Credits Received	Course Number	Class Equivalent
Art History	3 or 4	3 credits	ART 211	History of Art I
	5	6 credits	ART 211 & 212	History of Art I & II
Art, Studio Drawing	3, 4 or 5	3 Credits	ART 141	Drawing I
Art, Studio 2D Design	3, 4 or 5	3 Credits	ART	Elective
Art, Studio 3D Design	3, 4 or 5	3 Credits	ART	Elective
Biology	3	No Credit		
	4 or 5	8 credits	BIOL 181/L BIOL 182/L	Coll Biology I/Organismal Biology & Lab Coll Biology II/Cellular Biology & Lab
Chemistry	3	4 credits	CHEM 111/L	Principles of Chemistry with Lab
	4	5 credits	CHEM 121/L	General Chemistry I with Lab
	5	10 credits	CHEM 121/L CHEM 122/L	General Chemistry I with Lab General Chemistry II with Lab
Computer Science A	3	No Credit		
	4 or 5	4 credits	Computer Info Sys	Elective
Computer Science AB	3	No Credit		
	4 or 5	8 credits	Computer Info Sys	Elective
Economics (Macroeconomics)	3, 4 or 5	3 credits	ECON 201	Principles of Macroeconomics
Economics (Microeconomics)	3, 4 or 5	3 credits	ECON 202	Principles of Microeconomics
English Literature and Composition	3	No Credit		
	4	3 credits	ENG 101	Composition I
	5	6 credits	ENG 101 & ENG 130	Composition I & Intro to Literature
English Language and Composition	3	No Credit		
	4	3 credits	ENG 101	Composition I
	5	6 credits	ENG 101 & 102	Composition I & II
Environmental Science	3	No Credit		
	4 or 5	3 credits	Biology	Elective
Foreign Language Chinese Language and Culture	3	3 credits	FL 101	Intro to Critical Foreign Language I
	4	6 credits	FL 101 & 102	Intro to Critical Foreign Language I & II
	5	9 credits	FL 101, 102, & Elective	Intro to Critical Foreign Language I, II and Elective
Foreign Language French	3	3 credits	FRN 101	Beginning French I
	4	6 credits	FRN 101 & 102	Beginning French I & II
	5	9 credits	FRN 101, 102 & Elective	Beginning French I, II & Elective
French Literature	3	3 credits	French	Elective
	4	6 credits		
	5	9 credits		
Foreign Language German	3	3 credits	GER 101	Beginning German I
	4	6 credits	GER 101 & 102	Beginning German I & II
	5	9 credits	GER 102, 102 & Elective	Beginning German I, II & Elective
Foreign Language Japanese Language and culture	3	3 credits	FL 101	Intro to Critical Foreign Language I
	4	6 credits	FL 101 & 102	Intro to Critical Foreign Language I & II
	5	9 credits	FL 101, 102 & Elective	Intro to Critical Foreign Language I, II and Elective
Foreign Language Spanish	3	3 credits	SPN 101	Beginning Spanish I
	4	6 credits	SPN 101 & 102	Beginning Spanish I & II
	5	9 credits	SPN 101, 102 & Elective	Beginning Spanish I, II & Elective

Spanish Literature	3	3 credits	Spanish	Elective
	4	6 credits	Spanish	Elective
	5	9 credits	Spanish	Elective
U.S. Government & Politics	3	No Credit		
	4 or 5	3 credits	POLSC 101	American National Politics
Comparative Government & Politics	3	No Credit		
	4 or 5	3 credits	POLSC 201	Comparative Politics
History – European	3	3 credits	History	Elective
	4 or 5	6 credits	History	Elective
History – United States	3	3 credits	HIST 201	U.S. History I
	4or 5	6 credits	HIST 201 & 202	U.S. History I & II
History – World	3	3 credits	HIST 101	World Civilization I
	4 or 5	6 credits	HIST 101 & 103	World Civilization I & III
Human Geography	3	No Credit		
	4or 5	3 credits	Geography	Elective
Latin (Vergil)	3	3 credits	FL 101	Intro to Critical Foreign Language I
	4	6 credits	FL 102 & 102	Intro to Critical Foreign Language I & II
	5	9 credits	FL 101, 102 & Elective	Intro to Critical Foreign Language I, II and Elective
Mathematics – Calculus AB	3, 4 or 5	5 credits	MATH 126	Calculus and Analytic Geometry I
Calculus BC	3	5 credits	MATH 126	Calculus and Analytic Geometry I
	4 or 5	10 credits	MATH 126 MATH 224	Calculus and Analytic Geometry I Calculus and Analytic Geometry II
Music Theory	3, 4 or 5	3 credits	Music	Elective
Physics B	3, 4 or 5	10 credits	PHYS 201/L PHYS 202/L	Principles of Physics I with Lab Principles of Physics II with Lab
Physics C – Electricity & Magnetism	3, 4 or 5	5 credits	Physics	Elective
Physics C – Mechanics	3, 4 or 5	5 credits	Physics	Elective
Psychology	3	No Credit		
	4 or 5	3 credits	PSYCH 100	General Psychology
Statistics	3, 4 or 5	3 credits	MATH 156	Introduction to Statistics

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CLEP Equivalency Chart 2011-2012

Name of Exam	Course Number	Class Equivalent	ACE Recommended Score		Credit	Gen Ed
			Through June 2001	July 2001 to Present		
American Government	POLSC 101	Amer National Politics	47	50	3	SS
American Literature	ENG 210 & 212	Amer Literature I and II	46	50	6	
Analyzing & Interpret Literature	ENG 130 & Elective	Intro to Lit and Elective	47	50	6	H
Biology	BIOL	Elective (no Lab credit)	46	50	3	ST
Calculus	MATH 126	Calc & Analytic Geom I	41	50	5	M
Chemistry	CHEM	Elective (no Lab credit)	47	50	3	ST
College Algebra	MATH 121	College Algebra	46	50	4	M
College Algebra/Trigonometry	MATH 121	College Algebra	46	50	4	M

College Composition	ENG 101 & 102	Composition I & II		50	6	E
College Composition Modular	ENG 101	Composition I		50	3	E
College Mathematics	MATH 109	Math Explorations	420-500	50	3	M
English Comp with Essay	ENG 101 & 102	Composition I and II	420-500	50	6	E
English Comp without Essay	ENG 101 & 102	Composition I and II	420-500	50	6	E
English Literature	ENG 231 & 232	Lit of England I and II	46	50	6	H
Financial Accounting	ACCTG 201	Prin of Financial Acctg	NA	50	3	
French Language, Level I	FRN	FRN 101 & 102	42	50	6	H
French Language, Level II	FRN	FRN 101, 102, 201 & 202	45	59	12	H
Freshman College Composition	ENG 101 & 102	English 101 & 102	44	50	6	E
German Language, Level I	GER	GER 101 & 102	36	50	6	H
German Language, Level II	GER	GER 101, 102, 201 & 202	42	60	12	H
History of US I: to 1877	HIST 201	U.S. History I	47	50	3	HS
History of US II: 1865-Present	HIST 202	U.S. History II	46	50	3	HS
Human Growth & Development	PSYCH 151	Intro Human Develop	45	50	3	SS
Humanities	ART	Elective	420-500	50	6	H
Info Sys & Computer Applications	CIS	Elective	52	50	3	
Introduction to Business Law	BUSAD	Elective	51	50	3	
Intro to Educational Psychology	PSYCH	Elective	47	50	3	
Introduction to Psychology	PSYCH 100	General Psychology	47	50	3	SS
Introduction to Sociology	SOC 101	Intro to Sociology	47	50	3	SS
Natural Science	BIOL	Elective (no Lab credit)	420-500	50	6	ST
Pre-Calculus	MATH 124	Pre-Calculus Math	NA	50	5	M
Principles of Macroeconomics	ECON 201	Prin of Macroeconomics	44	50	3	SS
Principles of Microeconomics	ECON 202	Prin of Microeconomics	41	50	3	SS
Principles of Management	MGMT 201	Prin of Management	46	50	3	
Principles of Marketing	MKTG 340	Prin of Marketing	50	50	3	
Social Science & History	SOC/HIST	Sociology Elective History Elective	420-500	50	3 3	SS HS
Spanish Language, Level I	SPN	SPN 101 & 102	45	50	6	H
Spanish Language, Level II	SPN	SPN 101, 102, 201 & 202	50	63	12	H
Trigonometry	MATH 122	College Trigonometry	50	50	3	M
Western Civilization I	HIST 101	World Civ to 1100	46	50	3	HS
Western Civilization II	HIST 103	World Civ 1100-1800	47	50	3	HS

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

General Education: E=English, H=Humanities, HS=History, M=Math, SS=Social Science, ST=Science & Technology   04/01/11

DSST (DANTES) Equivalency Chart 2011-2012

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

General Education: H=Humanities, M=Math, SS=Social Science, ST=Science and Technology

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International Baccalaureate Equivalency Chart 2011-2012

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

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

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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, cohort-based, 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-related 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.

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

President's Leadership Program Goals

- To provide a sequence of courses and professional placements centered in the concept of trans-formational 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 University-Pueblo as first-time, full-time students. Applications to the PLP must demonstrate academic excellence, leadership potential, and community service experience.

Application Process

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

- PLP Application Form (available online on the CSU-Pueblo website).

- Essay on a Leadership Topic (see application form).

- Resume (including personal objectives, education, work experience, school and community leadership experiences, honors and awards).

- Two letters of recommendation from professionals (teachers, principals, pastors, employers, etc.).

- Copy of Official High School Transcript.

Timelines

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

Leadership Studies Minor
(Prerequisite: Acceptance into President's Leadership Program)

Requirements:

Courses		Titles	Credits
US	160	Principles of Leadership	3
US	260	Leadership in Service Organizations	3
US	360	Applied Leadership	3
US	460	Working with Experienced Leaders	3
		OR	
US	489	Field Placement in Leadership	3
Approved Electives (minimum)			6
		TOTAL	18

Students may choose from the following electives to complete the minor in Leadership Studies. Students are encouraged to diversify their course selections. **Only one course may count in both the student's major and the Leadership Studies minor**. Special topics courses related to leadership 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 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
PSYCH	464	Systems of Counseling and Psychotherapy	3
REC	270	Outdoor Leadership I	2
REC	350	Leadership and Ethics	3
REC	370	Outdoor Leadership II	2
SOC	432	Organization Theory	3
SPCOM	103	Speaking and Listening	3
US	491	Special Topics	3

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

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.

CSU-Pueblo has established a tradition of excellence throughout all 16 of its intercollegiate athletics programs. Pack Athletics have won one national championship, 66 RMAC championships, 65 national tournament appearances, seven regional tournament championships and 27 team top ten finishes (in individualized sports). CSU-Pueblo has also crowned 156 All-Americans, of which 23 have been named in the past 10 years.

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

Rawlings Outdoors Sports Complex

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 CSU-Pueblo 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 CSU-Pueblo, 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 collegiate and intramural sports offered at CSU-Pueblo. In addition, the CIP supports and organizes informal sporting teams as desired.

- *English Tutoring:* All international students are able to obtain free tutoring, as needed, in the area of language skill development. Individual and group appointments can be made accordingly in the CIP. Other academic tutoring is available across campus in various academic subjects.

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

National Student Exchange (NSE)

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

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

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

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

Study Abroad Programs

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

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

CONTINUING EDUCATION

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

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

Both degree- and non-degree seeking students may participate in Continuing Education programs. (Only degree-seeking students are eligible for financial aid.) Persons desiring classification as degree-seeking students in the External Degree Completion Program must fill out the External Degree Completion Application. Credit courses taken through the Colorado State 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, correspond-dence 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 ever-changing needs of business and industry. The programs can be designed to meet the specific needs of an organization and may be presented at the company site or, if requested, at the University. Similar services are available to school districts.

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

CSU-PUEBLO BOOKSTORE

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

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

To help keep educational expenses down, the bookstore staff aggressively seeks as many used textbooks as possible to offer students for their courses. The store conducts several on-campus buybacks throughout the year and online through its website. Textbook buybacks give students a financial return for their unwanted textbooks, and recycles these books both on campus and in the general college store market. Students can save money on textbooks by taking advantage of the online "Early Bird" discount each semester as part of the Textbook Reservation program: August 1-15 for Fall semester and December 1-31 for Spring semester. Students with financial aid awards can check online each semester for details on how they may use their aid for textbooks and the Early Bird discount. Students are allowed to charge up to $500.00 worth of textbooks to their student accounts.

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

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

FIRST-YEAR PROGRAMS

First-Year Programs seeks to ease the transition into college life for first-year students. Our student-focused

advisors assist students in any way possible that will ensure a successful first year and beyond. Advisors connect with students on a regular basis so as to ensure academic success.

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 First-Year 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 in the Library and Academic Resources Center (LARC), Room 165, and can be reached by phone at (719) 549-2584. Also, look on the web at http://www.colostate-pueblo.edu/fyp.

FOOD SERVICE LOCATIONS

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

The Columbine Café 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 ....7:00 a.m. -   9:30 a.m.
    Continental ....9:30 a.m. - 11:00 a.m.
    Lunch....................................11:00 a.m. -   2:30 p.m.
    Late Lunch.............................2:30 p.m. -   5:00 p.m.
    Dinner...................................5:00 p.m. -   7:30 p.m.

Saturday and Sunday

    Brunch ....10:30 a.m. -   1:30 p.m.
    Dinner...................................5:00 p.m. -   6:30 p.m.

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 Bistro is located on the main level of the Culebra Residence Hall on the north side of campus. A variety of hot foods made to order, late night snacks and other grab and go favorites are offered daily. The hours of operation are as follows:

    Monday thru Thursday.............8:00 a.m.   - 10:30 a.m.
                                      4:00 p.m.   - 12:00 a.m.
    Friday and Saturday ....5:00 p.m.   - 10:00 p.m.
    Sunday ....5:00 p.m.   - 12:00 a.m.

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 University-Pueblo. KTSC is the regional affiliate for the Public Broadcasting Service, (PBS).

KTSC-TV serves 323,000 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, Super School News, 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 center also has computers dedicated to math students working with online homework. The MLC provides CSU-Pueblo students a place and a plan for success in college level and remedial math classes. For more information, call the Math Learning Center at 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; Student Computer Lab; Dining Services with two different eating areas for you to select from (Columbine Café and La Cantina); Student Affairs; Student Health Center; Center for International Programs; Diversity Resource Center; Upward Bound; Office of Student Activities; Affirmative Action; and Student Conduct/Student Judicial Affairs.

The Occhiato University Center is operated by the department of Auxiliary Services located in 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 new ID's. Please contact Auxiliary Services office for the fee structure for replacement or reactivation of an old ID card. In addition the ThunderCard may be used to add "ThunderBucks" to the card (like a declining balance debit card) which can be purchased and placed on your ThunderCard. Thunderbucks can be used for purchases of food items at any food service location on campus plus you receive a 10% discount and pay no sales tax on the food purchased. In addition you may use your ThunderCard to purchase anything needed in the University Bookstore (there is a 10% discount on all items except textbooks and computer software), laundry services in the residence halls and some vending machines on campus. The staff in the Auxiliary Services Office would be happy to give you more detailed information on these items.

Lost and Found

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

Parking Decals

All students 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 Crestone Hall, Culebra Hall and Greenhorn Hall may park, with a permit sticker issued by the residence life staff in each hall in the parking lot north of the three new residence halls only at no cost. However, you may not park at any other location on campus without purchasing the regular permit to park in these lots. 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

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

Disability Resource Office

The Disability Resource Office provides personalized accommodation plans based on verified documentation. Students with documented disabilities should contact us in LARC 169 or call (719) 549-2648.

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 LARC 267 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 LARC 251 or call us at (719) 549-2901.

Writing Room

The Writing Room provides an inviting atmosphere where students can receive advice and positive feedback on any type of writing from research papers, letters, and writing assignments to poetry and fiction. Visit us in LARC 251,

online at http://www.colostate-pueblo.edu/owl, or call us to make an appointment at (719) 549-2901.

THE UNIVERSITY LIBRARY

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

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

Approximately 400,000 volumes are available, as well as access to over 23,000 periodical titles. The library's website provides access to over 100 online databases with reference information and journal articles, as well as web-based tutorials and help guides.

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

The library recently underwent a complete remodel and expansion. The new Library and Academic Resources Center opened in the spring 2011.

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. Student permits expire on August 31st every year.

GRADUATE POLICIES AND PROCEDURES

GRADUATE ADMINISTRATION

Graduate programs and curricula at Colorado State University-Pueblo are developed by the faculty and administration in the instructional colleges, centers and schools and are administered with the assistance of the Dean of Graduate Studies and Research and the 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 Biology (MS), Biochemistry (MS), Chemistry (MS), Industrial and Systems Engineering (MSISE), Business Administration (MBA), Education (M.Ed.), History (MA), 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) exam, a minimum score of 80 on the Michigan Test of English Proficiency, or a minimum band score of 5.0 on the International English Language Testing System (IELTS) test is required for admission. However, a minimum score of 550 on the TOEFL paper-based exam, a minimum score of 213 on the TOEFL computer-based exam, a minimum score of 80 on the TOEFL internet-based (iBT) exam, or a minimum band score of 6.0 on the IELTS is required for the Master in Business Administration (MBA) and the Master of Science with a major in Nursing. Students who complete an undergraduate degree at an institution in the United States are exempt from this requirement.

5) Specific programs may have additional requirements.

GRADUATE ADMISSION

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 all programs is 3.000;

- 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 academic 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 degree-seeking 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 program director and 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 chair 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 joint-degree (3+2) 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 approved transfer credit may be applied to the degree.

2) Have regular student status.

3) Complete the program's minimum number of hours of approved course work. The MBA and Industrial and Systems Engineering programs require a minimum of 36 semester hours. The Natural Sciences programs (Biology, Biochemistry, and Chemistry) require a minimum of 30-32 semester hours. The MSN requires a minimum of 53 semester hours. The English program requires 32-35 semester hours, History requires 30 semester hours, and the Teacher Education program requires 38 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 required by the program. If choosing the thesis option, submit five approved copies of the thesis to the Library for binding. The bound thesis will be distributed to each of the following: one to the program director/coordinator, two to the University Library, one to the committee chair, and one to the department. Reproduction and binding costs are the responsibility of the student.

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

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, the program director/coordinator 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 minimum degree requirements 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. 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 the 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 graduate hours shall be considered as full-time students (six hours, summer); those enrolled for six (6) hours shall be considered as half-time 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, the program director/coordinator, and the Records Office.

ACADEMIC STANDARDS

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

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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+  - 1.33
D   - 1.00  - Unsatisfactory performance
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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
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Students may apply no more than six (6) semester hours of work with a grade of C (i.e., C or C+) toward graduation requirements. Only grades of A - C, and S fulfill graduation requirements for graduate programs. Graduate students may repeat a maximum of six semester hours of graduate credit. Courses in which a grade of 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 college dean, the Dean of Graduate Studies and Research, and the Office of the Provost. The Provost or his/her designee shall make a final decision on the appeal and inform the student of that decision. Decisions by the Provost are final.

COMPREHENSIVE EXAMINATIONS

Graduate programs may require a final comprehensive and/or oral examination 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 prior to the work. The plan must define the topic of study and outline the research design. The plan must have the written approval of all members of the student's graduate committee, the program director/coordinator, and the appropriate dean.

The 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 prepared in an acceptable format and must include a title page comparable to the thesis format.

The report should include the purpose of the study or project, limitations, sources of data, the procedure used, literature review and citations, 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 high-quality printing and must use a paper of the same quality as the original and include color pages wherever appropriate. Other copies of the thesis may be duplicated in any manner the student desires.

It is imperative that the utmost care be taken in the preparation of the final copy of the thesis. The completion of the thesis, including 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 Dean, Graduate Studies and Research. The report must be signed by all members of the student's graduate committee. Students must pass the oral defense to complete their thesis or directed research requirement successfully.

APPEALS

All graduate policies, procedures, and regulations may be appealed. Appeals must be made in writing to the Office of the Provost. The academic grade appeals process is the same as is described in the undergraduate section on appeals. See *Grade Change Policy/Academic Appeals* listed in the *Academic Policies* section of this catalog.

PROGRAMS OF STUDY

Graduate Programs in Natural Sciences

The College of Science and Mathematics offers Master of Science degrees in three disciplines within the Natural Sciences: Biology MS, Chemistry MS, and Biochemistry MS. Students completing any of these degrees will develop advanced skills in the general discipline of choice and will apply these skills in the completion of a thesis research project or internship.

BIOLOGY (MS)

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

Expected Student Learning Outcomes

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

- *Mastery of the Scientific Method* - Independent development and mastery of problem solving skills including experimental design, execution, critical analysis, and interpretation of the results of original scientific experimentation (thesis) or experiential learning (internship).

- *Dissemination of Scientific Products* - Persuasive communication and defense of significant results of original scientific investigation presented in both written and oral format at a graduate peer-professional level.

- *Utilization of the Literature* - Critical evaluation of an independently accessed comprehensive body of scientific literature which is project relevant and foundational in supporting and explaining research findings in both written and oral format.

- *Development of a Relevant Knowledge Base* - Development of intrinsically held fundamental field-specific knowledge which will be applied to explain and defend research findings at a level of mastery expected by peer-professionals.

- *Professionalism and Self Responsibility* - Maintain a consistent professional work ethic of independently taking the initiative and motivation to produce tangible products of a quality commensurate with peer-standards in graduate or professional schools or in the career field being pursued.

Outcomes Assessment Activities

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

Degree Requirements

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

		Plan A (thesis option)	Plan B (non-thesis option)
BIOL	510	3	3
MATH	550	3	3
BIOL	598		4
	OR		
BIOL	599	6	
BIOL	593	1	1
BIOL	588		1
	OR		
BIOL	589	1	

Core Courses (1 of 4 required)

BIOL	540/L	3 or 4	3 or 4
	OR		
BIOL	543/L		
	OR		
BIOL	552/L		
	OR		
BIOL	553/L		

Elective Courses		12-13	16-17
TOTAL		30 min.	32 min.

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

Required General Courses

Courses		Titles	Credits
BIOL	510	Foundations in Graduate Studies	3
BIOL	593	Seminar	1
MATH	550	Statistical Methods	3
BIOL	588	Internship Seminar	1
		OR	
BIOL	589	Thesis Defense	1
		TOTAL	8

Required Biological Sciences Core Courses

Students will take **one** of the following courses:

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

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

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

BIOLOGY 3+2 PLAN (BS/MS)

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

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

CHEMISTRY (MS)

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

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

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

Expected Student Learning Outcomes

Upon completion of the Chemistry MS or BS/MS as part of the Graduate Programs in Natural Sciences (GPNS), students will:

- Be able to understand and evaluate the scientific literature and use it in their courses and their research.

- Be able to effectively communicate scientific research, both their own and information from the research literature, in written and oral fashions.

- Develop and master the scientific problem solving skills required to define and solve basic or applied original scientific questions using the scientific method.

- Actively engage in collaborative research/internships and discourse with the faculty in the Chemistry Department and other STEM disciplines.

- Disseminate, in collaboration with faculty, the products of the Chemistry-MS program within CSU-Pueblo community and with communities outside of the University in activities using their professional expertise.

Outcomes Assessment Activities

The faculty will use a variety of methods for evaluating student learning outcomes. These include required student enrollment in CHEM 510 (Foundations in Graduate Studies), which involves faculty directed instruction and practice in searching, evaluating, and discussing scientific literature, instruction in experimental design, and dissemination of scientific research results. Students completing this degree program will give a public research seminar (CHEM 593) that will be evaluated by cognizant GPNS faculty members. A written research thesis or internship reports will be publically presented and defended by students to demonstrate proficiency in their area of study, and these will be evaluated by the student's Graduate Advisory Committee. Students will collaborate with faculty to present the results of their thesis research or internship project within the greater Southern Colorado region, give seminars/posters on campus or at appropriate scientific meetings, publish the results of their research in peer reviewed scientific journals, or disseminate information through other appropriate mediums.

Degree Requirements

The course of study requires five semester credits of course work common to all students. Each student must complete three of the five core courses (9 semester credits). Students are required to complete 10-12 additional credit hours of approved graduate level electives in Chemistry, Biology, Math, or Engineering as outlined in the graduation plan developed with the student's advisor and graduate committee, and approved by the Program Director. The signed graduation plan may be completed at any time, but is a requirement for successful completion of CHEM 510.

Thesis option students are required to defend their research results before their thesis defense committee. Non-thesis option students must take a written comprehensive examination over courses taken in their program of study. A non-thesis option student must submit a formal written report based on an internship and defend their internship and work before their graduate committee.

Each student must pass qualifying exams in three of five areas of selected chemistry content (analytical, biological, inorganic, organic, or physical chemistry). Students will have two opportunities to pass each area exam. Qualifier examinations are scheduled during the week preceding the beginning of classes each semester or in consultation with the program director or department chair. If an examination is failed, the requirement may be satisfied by completing the designated undergraduate coursework in the appropriate subdiscipline, as specified by the program director or department chair, with a minimum grade of "B". Students enrolling into the 3+2 program will be exempt from the requirement to pass qualifying exams if they have completed courses at CSU-Pueblo in analytical, biological, inorganic, organic, or physical chemistry with a grade of "B" or better. Students enrolled in the 3+2 program required to pass qualifying exams will schedule the exams in consultation with the Program Director.

Chemistry program requirements are summarized as follows:

		Plan A (thesis option)	Plan B (non-thesis option)
CHEM	510	3	3
CHEM	588		1
CHEM	589	1	
CHEM	593	1	1
CHEM	598		4
CHEM	599	6*	

Core Courses (3 of 5 required – 9 credits)

CHEM	501	3	3
CHEM	511	3	3
	OR		
CHEM	512	3	3
CHEM	521	3	3
CHEM	529	3	3
CHEM	531	3	3
Elective Courses		10	14
TOTAL		30	32

* Students may only enroll for a total of 6 credit hours of CHEM 599, Thesis Research.

Elective courses may be selected from the following chemistry courses or others may be added with permission of the graduate committee.

Courses		Titles	Credits
CHEM	501/L	Advanced Organic Chemistry/Lab	4
CHEM	503	Polymer Chemistry	3
CHEM	511	Biochemistry I	3
CHEM	512/L	Biochemistry II/Lab	5
CHEM	519/L	Instrumental Analysis/Lab	5
CHEM	521	Advanced Inorganic Chemistry	3
CHEM	525	Environmental Chemistry	3
CHEM	529	Advanced Analytical Chemistry	3
CHEM	531	Advanced Physical Chemistry	3
CHEM	550	Industrial Chemistry	2

CHEM	591	Special Topics 1-4
CHEM	592	Research 1-3
CHEM	595	Independent Study.............................1-4

CHEMISTRY 3+2 PLAN (BS/MS)

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

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

BIOCHEMISTRY (MS)

The graduate degree program outlined leads to the degree of Master of Science in Biochemistry. The degree program prepares graduates for professional employment or for further advanced studies in molecular biosciences, including biochemistry and biotechnology.

Course work for this degree option includes several important classes at the intersection of the biological and chemical sciences, including advanced topics in cellular biology, biochemistry, and laboratory techniques. This program also offers a 3+2 plan, described elsewhere, which allows students to simultaneously complete requirements for a BS and MS degree in five years.

The Master of Science in Biochemistry requires 30 semester credit hours of approved graduate course work in the thesis option.

Expected Student Learning Outcomes

Upon completion of the Biochemistry MS or BS/MS as part of the Graduate Programs in Natural Sciences (GPNS), students will:

- Be able to understand and evaluate the scientific literature and use it in their courses and their research.

- Be able to effectively communicate scientific research, both their own and information from the research literature, in written and oral fashions.

- Develop and master the scientific problem solving skills required to define and solve basic or applied original scientific questions using the scientific method.

- Actively engage in collaborative research/internships and discourse with the faculty in the Chemistry Department and other STEM disciplines.

- Disseminate, in collaboration with faculty, the products of the Biochemistry-MS program within CSU-Pueblo community and with communities outside of the University in activities using their professional expertise.

Outcomes Assessment Activities

The faculty will use a variety of methods for evaluating student learning outcomes. These include required student enrollment in CHEM 510 (Foundations in Graduate Studies), which involves faculty directed instruction and practice in searching, evaluating, and discussing scientific literature, instruction in experimental design, and dissemination of scientific research results. Students completing this degree program will give a public research seminar (CHEM 593) that will be evaluated by cognizant GPNS faculty members. A written research thesis will be publically presented and defended by students to demonstrate proficiency in their area of study, and these will be evaluated by the student's Graduate Advisory Committee. Students will collaborate with faculty to present the results of their thesis research within the greater Southern Colorado region, give seminars/posters on campus or at appropriate scientific meetings, publish the results of their research in peer reviewed scientific journals, or disseminate information through other appropriate mediums.

Degree Requirements

The course of study requires 5 semester credits of course work common to all students, and 6 credits of thesis research. Each student must complete 4 core courses (13 semester credits). Students are required to complete 6 additional credit hours of approved graduate level electives in Biology, Chemistry, Math, or Engineering as outlined in the graduation plan developed with the student's advisor and graduate committee, and approved by the program director. The signed graduation plan may be completed at any time, but is a requirement for successful completion of CHEM 510. Students are required to defend their research results before their thesis defense committee.

Each student must pass a total of three qualifying exams one each in biochemistry and biology (molecular and cellular biology) and one of four other areas of selected chemistry content (analytical, inorganic, organic, or

physical chemistry). Qualifier examinations are scheduled during the week preceding the beginning of classes each semester or in consultation with the program director or department chair. If an examination is failed, the requirement may be satisfied by completing the designated undergraduate coursework in the appropriate subdiscipline, as specified by the program director or department chair, with a minimum grade of "B". Students enrolling into the 3+2 program will be exempt from the requirement to pass qualifying exams if they have completed courses at CSU-Pueblo in analytical, inorganic, organic, or physical chemistry; as well as cellular biology and molecular biology with a grade of "B" or better. Students enrolled in the 3+2 program required to pass qualifying exams will schedule the exams in consultation with the Program Director.

Biochemistry program requirements are summarized as follows:

(thesis option only)

CHEM	510	3
CHEM	589	1
CHEM	593	1
CHEM	599	6*

Core Courses (4 required – 13 credits)
CHEM	512**	3
BIOL	512**	3
BIOL	540/L	4
CHEM	531	3

Elective Courses	6
TOTAL	30

* Students may enroll for a total of 6 credit hours of CHEM 599, Thesis Research.

** Labs are not required.

Elective courses may be selected from the following courses or others may be added with permission of the graduate committee.

Courses		Titles	Credits
BIOL	502	Immunology	3
BIOL	503	Virology	3
BIOL	550/L	Survey of Genomics and Bioinformatics/Lab	3
BIOL	552/L	Advanced Microscopy/Lab	4
CHEM	501/L	Advanced Organic Chemistry/Lab	4
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	591	Molecular Basis of Disease (taught under Special Topics)	3
CHEM	592	Research	1-3
MATH	550	Statistical Methods	3

BIOCHEMISTRY 3+2 PLAN (BS/MS)

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

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

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 required of 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. Generally, graduate students are required to complete all leveling course requirements before enrolling in the first 500-level courses. In some instances, a student will be permitted to enroll in 500-level courses while completing the final leveling courses.

All MBA students are required to take the Graduate Management Admissions Test (GMAT). An admission formula of 200 times the undergraduate GPA (4.000 system) plus the GMAT score will constitute a scaled admission score for each applicant. Students will be required to have at least a 1000 score on the admission formula and at least 400 on the GMAT examination.

Students will not be allowed to enroll in more than six hours of graduate-level course work without being fully admitted to the program.

Students who fail to meet these admission 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 five primary learning goals.

1) **Expression of Thoughts and Ideas**

   - Our graduate students will be able to communicate effectively.

2) **Decision Making and Problem Solving**

   - Our graduate students will be able to analyze problems, identify relevant issues, and craft solutions.

3) **Decision Making in a Global Business Environment**

   - Our graduate students will be able to develop solutions for global business issues.

4) **Ethical Analysis**

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

5) **Analysis of Research**

   - Our graduate students will be able to critically analyze and question knowledge claims in the specialized discipline.

Assurance of Learning

The use of direct measures of student performance in the Hasan School of Business provides a relevant set of performance data. Reviewed by faculty, discipline groups, the School's Assurance of Learning Committee, and administrators, results of these measures are used to make program improvements. In addition to course grades, direct measures of student performance in the Hasan School of Business include:

- **The Educational Testing Service (ETS) Major Field Test in Business**. This test, administered nationwide, assesses what students have learned primarily in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally.

- **Course-Embedded Measures**. Exams, papers, presentations, and projects are course-embedded measures that can be used to assess student performance related to our MBA learning goals.

The Hasan School of Business compiles information to assess the success of MBA graduates. Information is obtained from the CSU-Pueblo Alumni Office, the Career Center, and other sources.

MBA Standards

A student who earns two "C" grades in graduate-level courses is placed on probation. If a third "C" or lower grade is earned, the student is automatically dismissed from the program.

The MBA degree will be conferred upon students who successfully complete a minimum of 36 hours of approved course work with a minimum GPA of 3.000. The curriculum includes the following 30 credits which are taken by all MBA students.

MBA CORE

Core Courses	Titles	Credits
ACCTG 510	Managerial Accounting	3
BUSAD 502	Business Ethics and Environment	3
BUSAD 575	International Business	3
ECON 510	Economics for Managers	3
FIN 530	Financial Management	3
MGMT 511	Production/Operations Management	3
MGMT 520	Management of Organizational Behavior	3
MGMT 565	Management Information Systems	3
MGMT 585	Management Policy and Strategy	3
MKTG 540	Marketing Management	3

SUB-TOTAL 30

In addition to the MBA core, each student must complete one of the following options.

Requirements for Option I
Approved Electives...6

Requirements for Option II
Select Two: CIS 550, 560, 561, 562, 581,
                582, or 591 6

TOTAL PROGRAM REQUIREMENT..............................36

All graduate courses for the MBA are listed in the appropriate department sections of accounting (ACCTG), business administration (BUSAD), computer information systems (CIS), economics (ECON), finance (FIN), management (MGMT), and marketing (MKTG).

JOINT BSBA/MBA AND BS-CIS/MBA PROGRAMS

Specific requirements for the joint BSBA/MBA and the BS-CIS/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, CSU-Pueblo'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 K-16 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 campus-wide responsibility, with faculty and administrators involved in support of the program's mission.

Graduate Program Goals and Student Outcomes
As teachers proceed through the program, they will be asked to apply and demonstrate their growth in learning and teaching related to the following goals and outcomes.

Content Knowledge Goal: Master teachers utilize content knowledge to raise the achievement of PK-12 learners.

1) Demonstrate growth in content knowledge related to teaching assignment and the application of content knowledge to classroom instruction and assessment.

Pedagogy Goal: Master teachers utilize best practices in instruction and assessment to raise achievement of PK-12 learners.

1) Understand scientifically-based practices in teaching and learning, including strategies in literacy education, instructional technology, differentiation of instruction, and apply them to raise student achievement.

2) Demonstrate multiple means of assessing and evaluating student learning and use them to change teaching and learning.

Professional Development and School Reform Goal: Master teachers understand the process for professional change in their own practice and in education, including the interpretation of educational research.

1) Locate, interpret, synthesize, and apply educational research in best practices in teaching.

2) Understand models for professional change, including teacher collaboration, professional learning communities, strategies for mentoring and coaching to facilitate change, and effective professional development.

3) Demonstrate understanding of reflective practice that results in improved classroom teaching and learning, including teacher reflection, use of technology in self-assessment, collaboration for change, and self-management of change.

4) Demonstrate understanding of system and organizational change in education, including models for school change and current research and trends in school change.

Leadership and Change Agent Goal: Master teachers apply educational research, including research on school reform and professional development to raise student achievement.

1) Demonstrate responsibility for student learning at high levels.

2) Demonstrate responsibility for school reform and leadership in school change.

Graduate Admission Policies and Procedures

Admission

Regular status will be given to degree-seeking students who meet all of the following requirements:

- A baccalaureate degree from an institution accredited by the regional accreditation agency (or equivalent).

- A minimum 3.000 undergraduate GPA.

- Submission of satisfactory scores from a standardized exam required for teacher licensure in the content area in which the applicant holds a teaching license (e.g., English or Elementary Education). Applicants who have taught successfully for three years may submit alternative evidence of content knowledge. Applicants who have completed the GRE or MAT should submit these scores.

- A current resume.

- A completed admissions file.

- Two letters of recommendation, one from an administrator familiar with applicant's teaching.

- A teaching license.

International students whose native language is not English must also meet the English language proficiency standard set forth in the *Graduate Admissions* section of the CSU-Pueblo Catalog.

Continuation

To continue in the program, students must maintain a cumulative GPA of 3.000.

Program Completion

All students must fulfill the following requirements for a graduate degree:

- A cumulate graduate GPA of 3.000 or better graduation. A maximum of six semester hours of course work at the grade of C+ or C may be applied toward graduation. A maximum number of nine semester hours of transfer credit may be applied to the degree.

- Regular student status.

- The program's minimum number of hours of approved course work (38 semester hours).

- Completion of a final portfolio review and oral examination. The portfolio project includes a directed research project.

- Submission of a graduation planning sheet signed by the student's graduate advisor during the semester prior to the semester in which graduation is to occur. The deadline for submission is published in the *Semester Notes*, *University Calendar*, and *CSU-Pueblo Catalog*.

M.Ed. Degree Course Requirements

The degree is designed with three components: (1) core courses in research and professional change; (2) pedagogy courses in literacy, differentiation of instruction, and technology; and (3) courses in an emphasis area chosen by the graduate student. A unique feature of the

degree is its alignment with the standards of the National Board for Professional Teaching Standards and participants' opportunity to work towards national board certification as they complete the degree.

Component 1: Core Requirements (11 hours)

Organizational change and school reform, as well as the responsibilities of professional leadership related to educational change, are emphasized in the core. The four courses in Component 1 are developmental, with the first taken within the first nine hours, the third within the last nine hours, and the final course completed as the capstone experience in the program. All courses focus on knowledge and skills related to teacher change and leadership as a change agent in the schools, Emphasis in interpreting and conducting research is included.

Although courses in Components 2 and 3 may be completed by teachers, admission to all Core courses requires full admission to the graduate program.

Course Requirements

Courses			Titles	Credits
ED	502	Core 1:	Teacher as Change Agent	3
ED	503	Core 2:	Teacher as Researcher	3
ED	504	Core 3:	Leading Change in America's Schools	2
ED	581		Practicum & Seminar in Education	3
			OR	
ED	593		Seminar	3

Component 2: Pedagogy Requirements (choose 3 hours from each category, 9 hours total)

CSU-Pueblo recognizes that *master* teachers demonstrate expertise in understanding and applying current best practices in each of the following areas: literacy education, instructional technology, and differentiation of instruction for all learners. All three were selected because recent research has indicated that application of best practices in these three areas will impact the quality of student achievement in K-12 classrooms, Teachers will select courses based on their development plan, with input from their graduate advisor. Courses cannot be double counted in emphasis areas and the Pedagogy Core.

Instructional Technology

Graduate students may select from instructional technology courses offered by the University, with approval of their faculty advisors. Sample courses include:

Courses		Titles	Credits
ED	520	Educational Media and Technology	3
ED	521	Classroom Integration of Internet	2
ED	523	Teaching and Managing Technology	2
ED	527	Productivity Tools for Classroom	1
ED	528	Integration of Educational Software	1
ED	534	Multimedia Design	3
ED	536	Technology & Assessment Tools	3
ED	591	Special Topics	1-3

Differentiation of Instruction

Graduate students may select from any differentiation courses, including the following:

Courses		Titles	Credits
BBE	503	Content Instruction for EL Learners	3
ED	512	Teaching Diverse Learners	3
ED	531	Diverse Learners & Technology	3

Literacy Education

Graduate students may select from any literacy courses, including the following:

Courses		Titles	Credits
BBE	520	Literacy for EL Learners	3
ED	529	Literacy & Technology	3
RDG	535	Content Area Literacy	3
RDG	550	Diagnosis and Remediation of Reading Problems	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 art education as well as their knowledge and skills in art processes and production.

M.Ed. (Early Learning)
Graduate Coordinator: Victoria Marquesen, Teacher Education Department

Courses		Titles	Credits
ED	510	Collaboration in Education 3	
ED	524	Advanced Techniques of Teaching Elementary Social Studies 2	
ED	525	Advanced Techniques of Teaching Elementary Science and Health................2	
ED	580	Integrated Methods 3	
RDG	510	Foundations of Reading Instruction 3	
RDG	511	Teaching Elementary Language Arts.........2	
RDG	550	Diagnosis and Remediation of Reading Problems..3	

Additional courses with an elementary or early childhood focus may be added with approval of the graduate advisor.

M.Ed. (Foreign Language)
Graduate Coordinator: Alegria Ribadeneira, English and Foreign Languages Department

The emphasis in Foreign Language supports teachers' growth as language teachers by expanding their proficiency in the language as well as their understanding of literature, linguistics, culture, and issues in foreign language instruction. In addition to traditional campus-base courses, the emphasis will include opportunities for foreign language immersion and foreign travel.

M.Ed. (Health & Physical Education)
Graduate Coordinator: Christine Rochester, Exercise Science, Health Promotion, and Recreation Department

Courses	Titles	Credits
EXHP 500	Workshop (methods of various physical activities) 1-5	
EXHP 522	Methods of Elementary Physical Education..3	
EXHP 529	Curriculum in Physical Education...............2	
EXHP 532	Applied Sport & Exercise Psychology 3	
EXHP 549	Facilitation of Adventure Education............3	
EXHP 562	Contemporary Issues in HPE.....................3	
EXHP 565	Adapted Physical Education 3	
EXHP 578	Methods of Secondary School PE 3	
EXHP 585	Methods in Health Promotion....................3	
EXHP 591	Special Topics.......................................1-3	
REC 550	Leadership and Ethics................................3	
REC 560	Outdoor Education 3	
REC 569	Outdoor Leadership I 2	
REC 570	Outdoor Leadership II 2	
REC 584	Outdoor Resources and Management 3	

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

Courses		Titles	Credits
ED	521	Classroom Integration of Internet..............2	
ED	523	Teaching and Managing Technology 2	
ED	527	Productivity Tools for Classroom 1	
ED	528	Integration of Educational Software 1	
ED	529	Literacy & Technology 3	
ED	531	Diverse Learners & Technology.................3	
ED	532	Hardware & Networking for Educators.......3	
ED	533	Instructional Theory & Tech Design 3	
ED	534	Multimedia Design 3	
ED	536	Technology & Assessment Tools...............3	
ED	591	Special Topics 1-3	

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: Jennifer Peters, Music Department

The Music Education Emphasis, when all courses have been developed and approved, will consist of the following components:

Core Knowledge areas, 12 credits

MUS Courses		Titles	Credits
MUS	545	Current Issues in Music Education..3	
MUS	559	Advanced Music Analysis 3	
MUS	565	Methods of Research in Music ED......3	

One of the following: 3

MUS	540	Kodaly Method for Music Education	3
MUS	550	Instrumental Conducting	3
MUS	560	Choral Conducting	3

TOTAL   12

Advanced Skill areas, 6 credits from the following:

MUS Courses		Titles	Credits
MUS	513	Advanced Vocal Pedagogy	1
MUS	523	Advanced Percussion Pedagogy	1
MUS	543	Advanced Woodwind Pedagogy	1
MUS	553	Advanced Brass Pedagogy	1
MUS	533	Advanced String Pedagogy	1
MUS*			2

TOTAL   6

*Applicable 500-level applied lessons or ensemble courses are still to be developed for approval and inclusion in the catalog.

M.Ed. (Special Education)
Graduate Coordinator: Victoria Marquesen, Teacher Education Department

Courses		Titles	Credits
ED	512	Teaching Diverse Learners	3
ED	531	Diverse Learners & Technology	3
RDG	550	Diagnosis and Remediation of Reading Problems	3
ED	506	Behavioral Support	3
ED	507	Levels of Support I	3
ED	508	Levels of Support II	3
ED	509	Levels of Support III	3
ED	545	Assessment & Data Driven Instruction	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 University-Pueblo's M.Ed. ensures that the program 1) monitors individual student progress necessary to support success, 2) provides summative information on student proficiency on all performance-based standards, and 3) provides reliable and valid information on the program's successes and weaknesses to ensure continuous program improvement.

The assessment design has four components:

1) Benchmarks, student outcomes and tasks aligned with the Colorado Department of Education standards for content areas leading to endorsements (Special Education, Linguistically Diverse Education, and Instructional Technology) and the National Board of Professional Teaching Standards, forming the basis for both monitoring of student success and program evaluation.

2) A series of evaluation tools that are used by faculty within courses and at program completion to assess student performance in meeting all standards.

3) A system for documenting and monitoring student progress using the student's electronic portfolio.

4) A system to identify program strengths and weaknesses resulting in continual program improvement.

Performance Standards, Program Alignment and Evaluation Criteria

A range of tasks aligned to program standards, curriculum and instructional activities throughout the program provide multiple sources of evidence to assess performance on each program standard. These tasks include a range of examples of teaching and learning, most of them authentic teaching performance, including all of the following:

- Curriculum plans: lesson plans and unit planning.

- Self evaluations and peer evaluations of teaching.

- Measures of achievement of PK-12 students: student work samples, pre-post data, and a range of assessment results.

- Standardized test scores (e.g., the PLACE exam for Special Education), as well as teacher-constructed exams and quizzes.

- Materials and artifacts from activities with parents, colleagues, and classroom teachers included in the master's portfolio.

- Evidence of ability to understand and utilize research to improve practice.

- Evidence of inquiry (e.g., action research, case studies) to change practice.

- Video case studies of teaching.

- Evidence of program and school change, including activities in coaching, mentoring, and professional learning communities.

Graduate students begin developing their M.Ed. portfolio with their first master's course. The portfolio is a web-based 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 self-evaluation 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 CSU-Pueblo. 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.

Upon completion of the English M.A. program, students will:

- Demonstrate professional level of competency in the study of literature.

- Incorporate theories and strategies of literary and rhetorical criticism at a professional level.

- Reveal professional-level writing skills appropriate to the genre(s) of the work.

- Employ research strategies for English studies in a professional manner.

- Manifest professional understanding of pedagogical theories and strategies appropriate to English.

- Demonstrate the ability to speak in informed and articulate ways about a range of theory, research, and resources relevant to literature, language, rhetoric, and composition studies.

Students who complete a creative thesis will also:

- Demonstrate a working vocabulary for critical analysis through theoretical venues as well as in-depth study of terminology and form within creative works to develop strong critiquing skills in the workshop environment.

- Produce writing competitive at a publishable level, which reflects an understanding of the creative writing genres, the business of writing, and the drafting and revision process for individual and collections of works.

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.

TOTAL 27-30

Course	Title	Credit
ENG 699	Thesis	3-6

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.

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TOTAL   33-36
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Course	Title	Credit
ENG 695	Independent Study	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 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
> Department of English and Foreign Languages
> Colorado State University-Pueblo
> 2200 Bonforte Boulevard
> 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.

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.

Expected Student Learning Outcomes

- Be able to draw conclusions about the historiography of the subjects they have studied.

- Be able to read and interpret secondary sources from any discipline of history concerning any area of the world.

- Be able to read and interpret primary source documents from a wide range of time periods.

- Be able to demonstrate skills in historical research and analysis and to defend their conclusions in well-written papers.

- Be able to compete successfully in appropriate job markets or gain admission to history PhD programs.

Assessment Activities

Faculty members in the MA program in History at CSU-Pueblo use several measures to gauge student learning. These include the Documents Based Questions (DBQ) papers, in which students write 8-12 page papers critically appraising a set of primary source documents. Students are also required to take a written or oral examination at the end of their study, demonstrating mastery over the content they learned. Faculty will use the results of these assessment measures to enhance and invigorate student learning.

Application Instructions

Submit the Colorado State University-Pueblo Application for Graduate Admission form, available from the Office of Admissions. Submit the $35.00 Application Fee. Also send a curriculum vitae or resume, a letter of intent and official college transcripts from all colleges/universities attended. Students may also submit a 10-15 page writing sample for consideration. No standardized test of any kind is required for admittance into the program.

Submit requested information to:

Graduate Director
Department of History
Colorado State University-Pueblo
2200 Bonforte Boulevard
Pueblo, CO 81001-4901

The deadline for applications will be May 1 of each year for admission the next fall. Students wishing to begin coursework in the spring must submit all admissions materials but will be admitted only on a provisional basis until the next cycle.

Degree Requirements

All students must fulfill the following requirements for a graduate degree in History.

- A cumulative graduate GPA of 3.000 or better at graduation. There will be a maximum limit of 12

credits transferable from other graduate institutions or 12 credits from courses taught at CSU-Pueblo before start of M.A. Program. It will be the responsibility of the Graduate Director to determine which credits will be accepted. Once students reach the thesis or exam stage, students will be required to take at least three credits each fall and spring semester in order to consult with faculty with respect to their thesis or exam. Those who do not will be dropped from the program.

- Have regular student status.

- Complete the program's minimum number of hours of approved course work (30 semester hours).

- Successful completion of either thesis or examination option as required by the selected emphasis area.

- Submit a Graduation Planning Sheet as advised by your program by the deadline listed on the Masters Graduate Planning Sheet.

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	3
HIST 592	Research	6
HIST	Electives selected in consultation with graduate advisor	12
HIST 599	Thesis Research (last semester)	3
	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
HIST 592	Research	3
HIST	Electives selected in consultation with graduate advisor	12

HIST 599   Thesis Research (last semester)
            OR
HIST 510   Directed study for Prelim Exams
            (last semester) 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	Electives selected in consultation with graduate advisor 9
HIST 599	Thesis Research (last semester) OR
HIST 510	Directed study for Prelim Exams (last semester) 3

                                        _____
                                        TOTAL   30

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.

Expected Student Learning Outcomes

Each MSISE graduate will be able to:

- Apply fundamental industrial engineering knowledge in the areas of facility planning and design and operations planning and control.

- Use fundamental industrial engineering tools including optimization and simulation.

- Apply a broad range of other industrial engineering and general engineering knowledge.

- Apply a set of specialized knowledge and tools in some area within or related to industrial engineering.

By applying the following rules, the MSISE program is designed to ensure these additional learning outcomes:

- Each student who does not have the required prerequisites in engineering economy, programming, and calculus based probability and statistics takes the necessary leveling courses.

- Every MSISE graduate must demonstrate knowledge of material in the core MSISE courses: simulation, operations research, facility planning and design, and operations planning and control.

Assessment Activities

The thesis is recommended to all students, but it is only required of those graduate assistants employed full (20 hours per week) or near full-time. Some students still choose to do a thesis while some others complete projects or do both. The MSISE program is assessed by (1) periodic review by the faculty of the quality of student theses and projects and (2) periodic review of the results of exit interviews with MSISE graduates. The department periodically reviews completed theses and the reports to assess learning and research skills of the graduates. Exit interview results are used to assess and improve the program.

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	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.

Courses		Titles	Credits
EN	520	Simulation Experiments	4
EN	571	Operations Research	3
EN	575	Facilities Planning and Design	3
EN	577	Operations Planning & Control	3
EN	593	Graduate Seminar	2
		Total Credit Hours	15

If the student has an undergraduate degree in industrial engineering or a related field, some or all of the core (except EN 593) may be waived; additional electives will replace the waived courses.

The Track Component

The Track Component consists of 9 credit hours of coursework selected by the student and his or her advisor to advance the professional and/or educational goals of the student. Currently available tracks include the Industrial Engineering and Engineering Management tracks.

Alternately, any student may pursue an Individualized Track tailored to the needs of the student. An Individualized Track must consist of 9 credit hours of graduate coursework, subject to the approval of the advisor and department.

In order to count towards graduation, any Special Projects, Special Topics, Graduate Projects or Independent Study course must consist of content appropriate for the track selected. The determination of an appropriate topic is at the discretion of the advisor and department.

The Industrial Engineering Track

Select at least 9 hours from:

Courses		Titles	Credits
EN	503	Ergonomics	3
EN	504	Scheduling and Sequencing	3
EN	530	Project Planning and Control	3
EN	540	Advanced Engineering Economics	3
EN	588	Graduate Projects	3
EN	590	Special Projects	1-3 VAR
EN	591	Special Topics	1-3 VAR

EN	595	Independent Study	1-5 VAR
EN	598	Internship	1-6 VAR

The Engineering Management Track

The Engineering Management Track consists of 9 credit hours of graduate level coursework in Accounting, Business Administration, Computer Information Systems, Economics, Finance, Management and/or Marketing. These credit hours must represent a coherent plan of study as approved by the advisor and department.

The Elective Component

The Elective Component consists of 9 credit hours of coursework selected from the list of courses approved as electives by the department. This list is available through the *Graduate Student Handbook* and the Graduate Program Director.

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)

Interim Associate Dean: Dr. Donna Wofford

Graduate Coordinator: Joe Franta

Undergraduate Coordinator: Ruth DePalma

Faculty: DeNiro, Rooney, Galloway, Williams, Whetzel

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

- Adult Acute Care Nurse Practitioner
- Adult Acute Care/Family Nurse Practitioner
- Adult Psychiatric Mental Health Nurse Practitioner
- Nurse Educator

Accredited by:

National League for Nursing Accrediting Commission, Inc.
3343 Peachtree Road NE, Suite 500
Atlanta, Georgia 30326
Phone: (404) 975-5000
Fax: 404 975 5020

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 evidenced based nursing practice. Emphasis is placed on effective student learning, academic achievement, and safe, competent nursing performance.

Department Goals

The Department of Nursing 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 Outcomes

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

a) Nurse Practitioner Primary Care Competencies in Specialty Areas: Adult, Family, Gerontological, Pediatric, and Women's Health.

b) Acute Care Nurse Practitioner Competencies.

c) Psychiatric-Mental Health Nurse Practitioner Competencies.

2) National League for Nursing Core Competencies of Nurse Educators.

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 a 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.

4) A minimum undergraduate GPA of 3.0.

5) A completed admissions file to graduate programs of Colorado State University-Pueblo.

6) A completed application to the Master of Science Major in Nursing program.

Prior to final acceptance to the graduate nursing program, the following must be submitted to Certified Background/Magnus (after receiving a personal identification number from the University and instructions from the Department of Nursing):

1) Proof of a current Colorado Registered Nursing license or eligibility for license.

2) Basic Life Support (BLS) is required for all emphasis areas. Certification in Advanced Cardiac Life Support (ACLS) is required for the acute care and family nurse practitioner emphasis. Pediatric Advanced Life Support (PALS) is required for the Family Nurse Practitioner emphasis.

3) Current physical examination within the last year and current immunization records. This includes the hepatitis B series, 2 step TB test, and measles, mumps, varicella, and rubella.

4) Three letters of recommendation: one academic, one clinical, and one other.

5) Letter of intent to the Department of Nursing including a brief history of self, reason for pursuing an advanced practice degree, and how applicant will accommodate for studies.

6) Curriculum vitae utilizing the CSU-Pueblo template available on the Department of Nursing website.

7) 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.

8) Drug screen must be completed within 30 days after admission to the University.

9) Proof of student professional liability advanced practice insurance after acceptance into nursing program and prior to starting class.

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.

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 3.00 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 successfully complete one of the following options:

- Non-thesis
- Directed research
- Thesis

4) Students should refer to the policies as outlined in the *Graduate Program* section of this Catalog.

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. Full-time 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 Satisfactory (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
NSG 506	Roles, Policy & Issues	3
NSG 508	Advanced Practice Theory	3
NSG 592	Research	3

Summer

Courses	Titles	Credits
NSG 551	Health and Well Being	3

Fall

Courses	Titles	Credits
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
NSG 562/L	Advanced Assessment	3

Core Graduate Nursing Courses
....**21 total credits**

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 in other emphasis areas.

Courses	Titles	Credits
NSG 510	Small Office Procedures	1
NSG 511	Orthopedics Procedures	1
NSG 512	Cardiovascular Management	1
NSG 513	Pulmonary Evaluation and Management	1
NSG 514	Women's Health & Pre/Post Natal Care	2
NSG 550	Health Policy & Finance	3
NSG 571	Healthcare Informatics	3
NSG 575	Curriculum Development	2
NSG 576	Teaching & Instruction in Nursing	4
NSG 591	Special Topics	1-6 Varies

Nursing Synthesis of Knowledge Courses

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

Courses	Titles	Credits
NSG 581/L	Synthesis: Psych Mental Health NSG I/Lab	8
NSG 582/L	Synthesis: Psych Mental Health NSG II/Lab	8
NSG 583/L	Synthesis Experience: Educator/Lab	9
NSG 585/L	Acute/Chron/Emer Health Needs I/Lab	8
NSG 586/L	Acute/Chron/Emer Health Needs II/Lab	8
NSG 588/L	Family Synthesis I/Lab	4
NSG 589/L	Family Synthesis II/Lab	9

Thesis Option

This option is available for all emphasis areas.

Courses	Titles	Credits
NSG 593	Thesis/Project Seminar	3
NSG 599	Thesis (Continuous enrollment is required until completion)	Varies

Directed Research Option

This option is available in all emphasis areas.

Courses	Titles	Credits
NSG 593	Thesis/Project Seminar	3
NSG 590	Special Projects (Continuous enrollment is required until completion)	Varies

Non-Thesis Option

Students who do not choose a thesis or directed research option must complete six to nine credits of approved electives and an oral and written comprehensive exam. Nurse Educator emphasis students are expected to complete the thesis or directed research option only.

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 570 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

Courses	Titles	Credits
NSG 506	Roles, Policy & Issues	3
NSG 508	Advanced Practice Theory	3
NSG 592	Research	3

Summer

Courses	Titles	Credits
NSG 551	Health and Well Being	3
NSG 550	Health Policy & Finance	3
NSG 571	Healthcare Informatics	3

Fall

Courses	Titles	Credits
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
NSG 562/L	Advanced Assessment/Lab	3

Spring

Courses	Titles	Credits
NSG 585/L	Acute/Chron/Emer Health Needs I/Lab	8

Summer

Courses	Titles	Credits
NSG 586/L	Acute/Chron/Emer Health Needs II/Lab	8

AACNP

Core Courses .... **21 total credits**
Synthesis of Knowledge .... **16 total credits**
AACNP Courses .... **6 credit hours**
Thesis/Project/Electives .... **6 total credits**
Total Credit Hours .... **49 credit hours**
Clinical Contact Hours .... **570 clinical contact hours**
Lab Contact Hours (NSG 562) .... **60 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 13 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 1050 hours of clinical practice is required. The full-time student is expected to complete the following coursework and clinical experience in six semesters:

Spring

Courses	Titles	Credits
NSG 506	Roles, Policy & Issues	3
NSG 508	Advanced Practice Theory	3
NSG 592	Research	3

Summer

Courses	Titles	Credits
NSG 550	Health Policy & Finance	3
NSG 551	Health and Well Being	3
NSG 571	Healthcare Informatics	3

Fall

Courses	Titles	Credits
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
NSG 562/L	Advanced Assessment/Lab	3

Spring

Courses	Titles	Credits
NSG 585/L	Acute/Chron/Emer Health Needs I/Lab	8
NSG 588/L	Family Synthesis I/Lab	4

Summer

Courses	Titles	Credits
NSG 586/L	Acute/Chron/Emer Health Needs II/Lab	8

Fall

Courses	Titles	Credits
NSG 589/L	Family Synthesis II/Lab	9

AACNP/FNP

Core Courses..**21 total credits**
Synthesis of Knowledge..........................**29 total credits**
AACNP/FNP Courses...............................**6 credit hours**
Thesis/Project/Elective.............................**6 total credits**
Total credit hours....................................**62 credit hours**
Clinical Contact Hours........**1050 clinical contact hours**
Lab Contact Hours (NSG 562).......**60 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 570 hours of clinical practice is required. The full-time student is expected to complete the following coursework and clinical experience in five to six semesters. Electives must be approved for the Adult Psychiatric Mental Health Nurse Practitioner emphasis before enrollment or acceptance.

Spring

Courses	Titles	Credits
NSG 506	Roles, Policy & Issues	3
NSG 508	Advanced Practice Theory	3
NSG 592	Research	3

Summer

Courses	Titles	Credits
NSG 550	Health Policy & Finance	3
NSG 551	Health and Well Being	3
NSG 571	Healthcare Informatics	3

Fall

Courses	Titles	Credits
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
NSG 562/L	Advanced Assessment/Lab	3

Spring

Courses	Titles	Credits
NSG 581/L	Synthesis: Psych Mental Health NSG I/Lab	8

Summer

Courses	Titles	Credits
NSG 582/L	Synthesis: Psych Mental Health NSG II/Lab	8

Core Courses..**21 total credits**
Synthesis of Knowledge..........................**16 total credits**
Emphasis Specific Courses.....................**6 credit hours**
Thesis/Project/Electives...........................**8 total credits**
Total Credit Hours....................................**51 credit hours**
Clinical Contact Hours..........**570 clinical contact hours**
Lab Contact Hours (NSG 562).......**60 lab contact hours**

Nurse Educator Emphasis

Nurse Educator emphasis focuses on the application of educational competencies in academic, laboratory and clinical settings. 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 360 hours of teaching contact hours is required. The full-time student is expected to complete the following coursework and student teaching experiences in four to six semesters. Two additional semesters provide time for the student to complete the thesis or directed research requirements. Either a thesis or directed research project is required in this emphasis area. The student is required to take NSG 593 (Thesis/Project Seminar) and either 3 credits of NSG 590 (Special

Projects) or 3 credits of NSG 599 (Thesis Research) depending upon which option the student chooses.

Spring

Courses	Titles	Credits
NSG 506	Roles, Policy & Issues	3
NSG 508	Advanced Practice Theory	3
NSG 592	Research	3

Summer

Courses	Titles	Credits
NSG 571	Healthcare Informatics	3
NSG 575	Curriculum Development	2
NSG 576	Teaching & Instruction in Nursing	4

Fall

Courses	Titles	Credits
NSG 552	Advanced Pathophysiology	3
NSG 561	Advanced Pharmacology	3
NSG 562/L	Advanced Assessment/Lab	3

Spring

Courses	Titles	Credits
NSG 583/L	Synthesis Experience: Educator/Lab	9
NSG 593	Thesis/Project Seminar	3

Summer

Courses	Titles	Credits
NSG 551	Health and Well Being	3
NSG 599	Thesis Research	1-6 Varies

Fall

Courses	Titles	Credits
NSG 599	Thesis Research	1-6 Varies

Core Courses..21 total credits
Synthesis of Knowledge............................9 total credits
Emphasis Specific Courses .... 9 credit hours
Thesis/Project...6 total credits
Total Credit Hours................................. 45 credit hours
Clinical/Teaching Contact Hours .... 450 hours
Lab Contact Hours (NSG 562) .... 60 lab contact hours

Post Masters Certification: Adult Acute Care Nurse Practitioner, Adult Acute Care/Family Nurse Practitioner, Adult Psychiatric Mental Health Nurse Practitioner, Nurse Educator

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.

Post Masters Certification: Residency and Fellowship

A post masters certification is also available for residency and fellowship experience working with vulnerable populations. The residency includes 1800 clinical hours (18 semester hours) and may be followed by a fellowship of 1800 clinical hours (18 semester hours). This program facilitates the new nurse practitioner into clinical practice. Upon completion the nurse practitioner will have completed the required hours for prescriptive authority in Colorado. The residency and fellowship include a student stipend and benefits. Please contact the Graduate Nursing Program Coordinator for further details.

COLLEGE OF EDUCATION, ENGINEERING, AND PROFESSIONAL STUDIES

Dr. Hector Carrasco, Dean

Academic Departments

Engineering Technology, Construction and Automotive Industry Management

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

Minor: Automotive Industry Management

Engineering

Majors: Engineering (BSE) –Specialization: Mechatronics
Industrial Engineering (BSIE)
Industrial and Systems Engineering (MS)
   (See *Graduate Programs* section of catalog)

Minors: Engineering
Industrial Engineering

Exercise Science, Health Promotion, and Recreation

Major: Athletic Training (BS)
Exercise Science, Health Promotion and
Recreation (BS)
   Emphasis Areas:
      Community/Commercial Recreation
      General Exercise Science
      Health Promotion/ Wellness
      K-12 Physical Education Teacher
         Preparation
      Outdoor Leadership

Minors: Coaching
Exercise Science and Health Promotion
Fitness and Recreational Sports Management
Outdoor Physical Education
Recreation

Nursing

Major: Nursing (BSN)
Nursing (MS)
   (See *Graduate Programs* section of catalog)
    Emphasis Areas:
      Adult Acute Care Nurse Practitioner
      Adult Acute Care/Family Nurse Practitioner
      Adult Psychiatric Mental Health Nurse
         Practitioner
      Nurse Educator

Teacher Education

Major: Liberal Studies (BS)
Education (M.Ed.)
   (See *Graduate Programs* section of catalog)
      Emphasis Areas:
         Art Education
         Early Learning
         Foreign Language
         Health & Physical Education
         Instructional Technology
         Linguistically Diverse Education
         Music Education
         Special Education

Licensure Areas: Elementary
                  Secondary
                  K-12

Minors: Education
Reading

Mission

The College of Education, Engineering, and Professional Studies degree programs reflect Colorado State University-Pueblo's professional focus and are designed to prepare graduates for positions in industry, education, business, and governmental agencies.

The mission of the College is to offer a career-oriented education that efficiently and effectively prepares students to excel as professionals.

Mission objectives:

- To be the premier educational institution in Southern Colorado that provides professional programs.

- To be the preferred source in Southern Colorado for consulting services, research effort, service learning, and other linkages to the public schools, industry, and the community.

- To be recognized for effectiveness in the professional development of faculty, staff, and students.

The College embraces the model of continuous improvement through the use of assessment in evaluating and improving student learning.

DEPARTMENT OF ENGINEERING TECHNOLOGY, CONSTRUCTION AND AUTOMOTIVE INDUSTRY MANAGEMENT

Department Chair: Sylvester A. Kalevela

AUTOMOTIVE INDUSTRY MANAGEMENT PROGRAM

Program Coordinator: Cathi J. Robbe

Faculty: Bencini, Robbe, Smith

The major in automotive industry management 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.

Student Learning Outcomes

Students in the AIM Program will be able to:

- Analyze profitability, efficiency and productivity using automotive financial documents and determine an appropriate managerial course of action;

- Manage and implement retail inventory control systems including loss sales reporting, pricing, and benchmarking and distribution systems;

- Recognize and apply proper health, safety, and environmental regulations based on federal and state standards;

- Demonstrate critical thinking and problem solving in the diagnosis and service of automotive systems;

- Effectively communicate concern, cause, correction and confirmation regarding vehicle diagnosis and service to both the technician and/or customer;

- Develop professional writing and oral presentation skills regarding techniques for selling in the automotive industry; and

- Develop employment seeking skills and compile a professional development portfolio commensurate with AIM degree and entry level management positions within the automotive industry.

General Requirements for the AIM Program

- AIM majors are required to complete an approved curriculum with a minimum grade of C (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

AIM Courses		Titles	Credits
AIM	105	Intro to the Parts & Service Industry	1
AIM	115	Automotive Engine Design, Operation and Repair	5
AIM	125/L	Automotive Suspension & Brake Systems/Lab	4
AIM	155	Automotive Parts Operations	4
AIM	165/L	Automotive Power Trains & Drive Lines/Lab	4
AIM	235/L	Automotive Fuel Systems & Exhaust Emissions/Lab	4
AIM	245/L	Automotive Electrical Systems I/Lab	4
AIM	255/L	Automotive Electrical Systems II/Lab	4
AIM	265	Automotive Parts Management Systems	4
AIM	305	Auto Customer Service Regulatory Issues	3
AIM	325	Fuels and Lubricant Production, Marketing and Conservation	3
AIM	335	Automotive Shop Practices	5
AIM	345	Advanced Automotive Systems	5

AIM   405   Personal Selling Methods &
               Techniques 4
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	Introduction 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	Credits
AIM	115	Automotive Engine Design, Operation and Repair 5
AIM	235/L	Automotive Fuel Systems and Exhaust Emissions/Lab 4
AIM	245/L	Automotive Electrical Systems I/Lab.....4
Approved AIM Electives (min) 7

TOTAL   20

Outcomes Assessment Activities

- Graduating students complete an exit survey that provides feedback on the quality and usefulness of the coursework for professional preparation.

- Employer surveys are collected every three years.

- The AIM Advisory Committee meets every fall semester to review the three year cycle report and make suggestions for program improvement. The committee also meets with current AIM students for an open discussion regarding the AIM program.

- Assessment materials are collected yearly, (except the employer survey) and analyzed and reported on a three year cycle.

CIVIL ENGINEERING TECHNOLOGY PROGRAM

Program Coordinator: Sylvester A. Kalevela

Faculty: 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 Objectives

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

- Prepared to apply established engineering principles and standards of practice in developing solutions to civil engineering problems, and

- Prepared for successful careers in civil engineering by providing them with the ability to contribute to engineering teams in various practice areas including (a) engineering analysis and design, (b) construction planning and management, (c) experimentation, (d) technical documentation, and (e) systems operations or maintenance.

Student Learning Outcomes

Students who successfully complete the CET program at CSU-Pueblo will have the ability to:

- Utilize graphics techniques and at least one industry-standard engineering graphics software to produce engineering documents;

- Utilize surveying methods and equipment for land measurement and construction layout;

- Perform field data collection for civil engineering systems and laboratory tests for civil engineering materials;

- Select construction methods and materials and estimate material quantities for construction projects;

- Employ productivity software to efficiently solve technical problems;

- Prepare and present engineering documents such as laboratory test reports, construction drawings, project specifications, change orders, and construction schedules;

- Conduct cost estimates for civil engineering projects and evaluate impacts of engineering solutions to society;

- Apply basic technical concepts to the solution of civil engineering problems involving hydraulics, hydrology, geotechnics, structures, material behavior, transportation systems, and water and wastewater systems; and

- Perform standard analysis and design of elements for structures, hydraulic and hydrologic systems, construction operations, and transportation systems.

The Civil Engineering Technology Curriculum

The CET curriculum consists of courses listed under the following major categories:

Math, Science and Computer Courses

Courses		Titles	Credits
CIS	100	Intro to Word and Windows	1
CIS	103	PowerPoint and Web Publishing	1
CIS	104	Excel Spreadsheets	1
CHEM	111/L	Principles of Chemistry/Lab	4
MATH	121	College Algebra	4
MATH	124	Pre-Calculus Math	5
MATH	126	Calculus & Analytic Geometry I	5
PHYS	201/L	Principles of Physics I/Lab	4

TOTAL 25

Technical Sciences for Civil Engineering Technology

Courses		Titles	Credits
CET	202	Statics	3
CET	206	Strengths of Materials	4
CET	222	Dynamics	3
CET	226	Engineering Problem Solving	2

TOTAL 12

Civil Engineering Technology Courses

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	Heavy/Highway Cost Estimating	3
CET	315	Soil Mechanics Technology	3
CET	316	Structural Analysis	3
CET	317	Hydraulics	3
CET	372	Traffic Analysis and Control	3
CET	404	Structural Steel Design	3
CET	405	Reinforced Concrete Design	3
CET	412	Hydrology	3
CET	415	Water & Sewer Systems Design	3
CET	455	Senior Project Seminar	1
CET	456	Senior Project	3
CET	473	Highway Design	3

TOTAL 54

Civil Engineering Technology Elective Courses
(Select two courses for a total of 6 credits.)

Courses		Titles	Credits
CET	303	Construction Management	3
CET	304	Building Cost Estimating	3
CET	312	Route Surveying	3
CET	313	Architectural Drafting I	3
CET	314	Architectural Drafting II	3
CET	401	Land Surveying	3
CET	475	Engineer-in-Training Preparation	3
CET	491	Special Topics	1-3 Var
CET	495	Independent Study	1-3 Var

TOTAL 6

Technical Elective

Course	Title	Credits
Technical Elective (3 credit hours)		3

Graduation Requirements

CET Program Requirements

- Students are required to complete an approved program of study with a cumulative GPA of 2.000 or better in the CET major courses.

- Students are required to demonstrate skill and knowledge in the areas of quantitative analysis and science by having a cumulative GPA of 2.000 or better in the required mathematics and physics courses.

- Civil Engineering Technology majors are required to demonstrate the ability to solve problems appropriate to their discipline and to complete a final senior-year

technical project requiring a written report and an oral presentation.

Institutional and General Education

To complete the General Education requirements, students are required to take a total of 35 credit hours consisting of the skills and knowledge components as specified under the undergraduate *General Education Requirements* section of this catalog. Civil Engineering Technology (CET) students take 11 of the 35 credit hours of the general education requirements under the required math and physical science courses.

Therefore, the CET majors are expected to take 24 credit hours to complete the skills and knowledge components of the general education requirements. The skills and knowledge components include (a) Written Communication (6 credit hours), (b) Humanities and Speech Communication (9 credit hours), (c) History (3 credit hours) and (d) Social Sciences (6 credit hours). Please refer to the undergraduate *General Education Requirements* section of this catalog for actual courses required to fulfill the skills and knowledge components.

General Education Requirements in Written
Communication, Humanities, History and
Social Sciences...24

Co-curricular Activities

The CET faculty supports and encourages the involvement of civil engineering technology majors in at least one technical organization relevant to the civil engineering discipline.

Outcomes Assessment Activities

- To be eligible for graduation, all civil engineering technology majors are required to take an exit examination. The results of the exit examination are used in the evaluation of the program but have no effect on student's GPA.

- Graduates and their employers are surveyed on program satisfaction and job performance following their graduation.

Civil Engineering Technology Typical Schedule of Courses

Freshman - Fall

Courses		Titles	Credits
CET	101	Intro to Engineering Technology	2
CET	102	Surveying I	3
CET	115	Civil Drafting I	3
CIS	100	Intro to Word & Windows	1
CIS	103	PowerPoint and Web Publishing	1
CIS	104	Excel Spreadsheets	1
MATH	121	College Algebra	4
		TOTAL	15

Freshman – Spring

Courses		Titles	Credits
CET	103	Surveying II	3
CET	116	Civil Drafting II	3
ENG	101	Composition I	3
MATH	124	Pre-Calculus Math	5
General Education: Humanities			3
		TOTAL	17

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	Concrete and Asphalt Materials	3
CET	222	Dynamics	3
ENG	102	Composition II	3
General Education: Social Science			3
		TOTAL	16

Junior - Fall

Courses		Titles	Credits
CET	305	Heavy/Highway Cost Estimating	3
CET	316	Structural Analysis	3
CET	317	Hydraulics	3
CHEM	111/L	Principles of Chemistry/Lab	4
SPCOM	103	Speaking and Listening	3
		TOTAL	16

Junior - Spring

Courses		Titles	Credits
CET	315	Soil Mechanics Technology	3
CET	372	Traffic Analysis and Control	3
CET	412	Hydrology	3
General Education: Humanities			3
General Education: Social Science			3
		TOTAL	15

Senior - Fall

Courses		Titles	Credits
CET	405	Reinforced Concrete Design	3
CET	415	Water & Sewer System Design	3
CET	455	Senior Project Seminar	1
CET	473	Highway Design	3
CET Elective			3
General Education: History			3

TOTAL   16

Senior - Spring

Courses		Titles	Credits
CET	404	Structural Steel Design	3
CET	456	Senior Project	3
Technical Elective			3
CET Elective			3

TOTAL   12

Total required credit hours 124

CONSTRUCTION MANAGEMENT PROGRAM

Program Coordinator: Michael A. Mincic

Faculty: Kalevela, Liu, Mincic

The major in construction management leads to the Bachelor of Science (BS) degree in Construction Management. Graduates of the Construction Management (CM) program enter the industry as project superintendents, field supervisors, project managers, or owner's representatives for a variety of construction related firms such as general contractors, specialty subcontractors, construction managers, designers, developers, consultants, or owners.

Program Goals

The goal of the Construction Management program is to prepare baccalaureate degree graduates who have the necessary skills to plan, organize, staff, lead and exercise control in the directing and coordinating of resources to achieve construction project objectives. Therefore, the objective of the program is to produce graduates who have the technical grounding in construction processes for infrastructure and have managerial skills to plan and direct projects.

Student Learning Outcomes

Students who successfully complete the CM program are expected to have the ability to:

- Apply knowledge, techniques, skills, and tools of the construction industry in construction activities;

- Select and apply knowledge of mathematics, science, and technology to construction problems;

- Perform standard tests, organize and interpret test data, and apply test results to improve construction processes;

- Function effectively as members or leaders on construction teams;

- Communicate effectively regarding subjects related to construction activities;

- Demonstrate a disposition to engage in self-directed continuing professional development;

- Demonstrate an understanding of professional and ethical responsibilities; and

- Demonstrate commitment to quality, timeliness, and continuous improvement.

Construction Management Curriculum

The CM curriculum consists of courses listed under the major categories listed below.

Skills Component

Courses		Titles	Credits
ENG	101	Composition I	3
ENG	102	Composition II	3

TOTAL   6

Knowledge Component

Courses		Titles	Credits
SPCOM	103	Speaking and Listening	3
General Education: History			3
General Education: Humanities			6
Social Sciences (6 hours listed under Business**)			

TOTAL   12

Math and Sciences

Courses		Titles	Credits
MATH	121	College Algebra	4
MATH	156	Introduction to Statistics	3

CHEM	111/L	Principles of Chemistry/Lab	
		OR	
GEOL	101/L	Earth Science/Lab	4
PHYS	201/L	Principles of Physics/Lab	4

TOTAL 15

Business and Management

Courses		Titles	Credits
ACCTG	201	Principles of Financial Accounting	3
BUSAD	270	Business Communications	3
BUSAD	302	Ethics in Business	3
ECON	201**	Principles of Macroeconomics	3
ECON	202**	Principles of Microeconomics	3
MGMT	201	Principles of Management	3

TOTAL 18

**ECON 201 and 202 are also counting for the Social Science General Education Requirement.

Introduction to Computers

Courses		Titles	Credits
CIS	100	Introduction to Word and Windows	1
CIS	103	PowerPoint & Web Publishing	1
CIS	104	Excel Spreadsheets	1

TOTAL 3

Major Courses

Courses		Titles	Credits
CET	102	Surveying I	3
CET	103	Surveying II	3
CET	115	Civil Drafting I	3
CET	207	Construction Materials & Methods	3
CET	208	Concrete and Asphalt Materials	3
CET	303	Construction Management	3
CET	304	Building Cost Estimating	3
CET	305	Heavy/Highway Cost Estimating	3
CM	101	Intro to Construction Management	2
CM	231	Statics and Structures	4
CM	320	Soils in Construction	3
CM	330	Wood Structural Systems	3
CM	341	Concrete and Steel Structures	4
CM	351	Construction Planning & Scheduling	3
CM	445	Construction Safety	2
CM	451	Mechanical & Electrical Systems	4
CM	461	Construction Law	3
CM	465	Construction Accounting & Finance	3
CM	475	Senior Project	3

TOTAL 58

Technical and Management Electives

Select from ACCTG, BUSAD, CET, CM, EN, FIN, MGMT or MKTG 5

Upper Division Technical and Management Electives

Select from ACCTG, BUSAD, CET, CM, EN, FIN, MGMT or MKTG 3

Total required credit hours.. 120

Graduation Requirements

Construction Management Program Requirements

- Students are required to complete an approved program of study with a cumulative GPA of 2.000 or better in the CM major courses.

- Students are required to demonstrate skills and knowledge in the areas of quantitative analysis and science by having a cumulative GPA of 2.000 or better in the required mathematics and physical science courses.

- Construction management majors are expected to demonstrate the ability to solve problems pertinent to the construction industry by completing a senior-year capstone activity that requires a packaged submittal and an oral presentation.

Institutional and General Education Requirements

To complete the General Education requirements, students are required to take a total of 35 credit hours consisting of the skills and knowledge components as specified under the undergraduate *General Education Requirements* section of this catalog. Construction Management (CM) students will take 17 of the 35 credit hours of the general education requirements under the required math and physical science courses and the required business and management component.

Therefore, the CM majors are expected to take 18 credit hours to complete the remaining skills and knowledge components in Written Communication (6 credit hours), Humanities and Speech Communication (9 credit hours), and history (3 credit hours). Please refer to the undergraduate *General Education Requirements* section of this catalog for the list of courses that can be taken to fulfill the skills and knowledge components.

General Education Requirements in Written
Communication, Humanities, and History 18

Outcomes Assessment Activities

- To be eligible for graduation, all construction management majors are required to take an exit examination. The results of the exit examination are used in the evaluation of the program but have no effect on the student's GPA.

- Graduates and their employers are surveyed on program satisfaction and job performance following their graduation.

- The CM Advisory Committee meets every year to review the three year cycle report and make suggestions for program improvement. The committee also meets with current CM students for an open discussion regarding the CM program.

Co-curricular Activities

The CM faculty supports and encourages the involvement of construction management majors in at least one technical organization relevant to the construction enterprise.

DEPARTMENT OF ENGINEERING

Department Chair: Jane M. Fraser

Faculty: Bedoya Valencia, 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 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. 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 heart-lung 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.

BACHELOR OF SCIENCE IN ENGINEERING (BSE) WITH A MECHATRONICS SPECIALIZATION

The BSE program has the following educational objectives and outcomes, which have been approved and are reviewed regularly by the BSE Advisory Board.

BSE-Mechatronics Program Outcomes

The BSE-Mechatronics program is designed so that students graduate from the program with the following abilities and knowledge:

- An ability to apply knowledge of mathematics, science, and engineering;

- An ability to design and conduct experiments, as well as to analyze and interpret data;

- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;

- An ability to function on multi-disciplinary teams;

- An ability to identify, formulate, and solve engineering problems;

- An understanding of professional and ethical responsibility,

- An ability to communicate effectively;

- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;

- A recognition of the need for, and an ability to engage in life-long learning;

- A knowledge of contemporary issues; and

- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

BSE-Mechatronics Educational Objectives

During the first few years after graduation, BSE-Mechatronic graduates should be able:

- Conduct low-level designs and modifications of mechatronic systems;

- Trouble shoot and support existing mechatronic systems;

- Work directly with suppliers and customers of mechatronic systems;

- Manage small and support large engineering projects;

- Assume ownership and accountability for engineering projects;

- Function well on teams of engineers with different skill levels;

- Implement basic quality control principles;

- Write sound technical documents such as requests for proposals, grant applications, project specifications and technical reports;

- Continue their education at the graduate level; and

- Obtain additional engineering certifications.

Specific Requirements for the BSE-Mechatronic Degree

Students are required to have earned a cumulative GPA of 2.000 or better in required EN courses.

Courses		Titles	Credits
EN	101	Introduction to Engineering	2
EN	103	Problem Solving for Engineers	3
EN	107	Engineering Graphics	2
EN	211	Engineering Mechanics I	3
EN	212	Engineering Mechanics II	3
EN	231/L	Circuit Analysis I/Lab	5
EN	260	Basic Electronics	2
EN	263	Electromechanical Devices	3
EN	321	Thermodynamics I	3
EN	324/L	Materials 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/L	Engineering of Manufacturing Processes/Lab	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	486	Senior Seminar	2
EN	487	Engineering Design	3
Math/Science Electives			3
Technical Electives			3

TOTAL   80

Other Required Courses

Courses		Titles	Credits
MATH	126	Calculus & Analytic Geometry I	5
MATH	224	Calculus & Analytic Geometry II	5
MATH	207	Matrix & Vector Algebra with Applications	2

Courses		Titles	Credits
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 129

Technical electives must be chosen from an approved list or have the approval of an Engineering advisor.

Typical Schedule of Courses for the BSE-Mechatronics Degree

Freshman Year

Courses		Titles	Credits
EN	101	Introduction to Engineering	2
EN	103	Problem Solving for Engineers	3
EN	107	Engineering Graphics	2
ENG	101	Composition I	3
ENG	102	Composition II	3
MATH	126	Calculus & Analytic Geometry I	5
MATH	224	Calculus & Analytic Geometry II	5
PHYS	221/L	General Physics I/Lab	5
General Education			3

TOTAL 31

Sophomore Year

Courses		Titles	Credits
EN	211	Engineering Mechanics I	3
EN	212	Engineering Mechanics II	3
EN	231/L	Circuit Analysis I/Lab	5
EN	260	Basic Electronics	2
EN	263	Electromechanical Devices	3
EN	324/L	Materials Science and Engineering/Lab	4
MATH	207	Matrix & Vector Algebra with Applications	2
MATH	337	Differential Equations I	3
PHYS	222/L	General Physics II/Lab	5

TOTAL 30

Junior Year

Courses		Titles	Credits
EN	321	Thermodynamics	3
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/L	Engineering of Manufacturing Processes/Lab	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	486	Senior Seminar	2
EN	487	Engineering Design	3
Math/Science Electives			3
Technical Electives			3
General Education			12

TOTAL 35

BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING (BSIE)

The BSIE program has the following educational objectives and outcomes, which have been approved and are reviewed regularly by the BSIE Advisory Board.

BSIE Program Outcomes

The BSIE program is designed so that students graduate from the program with the following abilities and knowledge:

- An ability to apply knowledge of mathematics, science, and engineering;

- An ability to design and conduct experiments, as well as to analyze and interpret data;

- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;

- An ability to function on multi-disciplinary teams;

- An ability to identify, formulate, and solve engineering problems;

- An understanding of professional and ethical responsibility;

- An ability to communicate effectively;

- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;

- A recognition of the need for, and an ability to engage in life-long learning;

- A knowledge of contemporary issues; and

- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

BSIE Educational Objectives

During the first few years after graduation, BSIE graduates should be able to:

- Identify root causes of symptoms and fix problems in situations where data and resources may be lacking and multiple problems may exist;

- Function well on teams of engineers with different skill levels;

- Obtain jobs of increasing responsibility applying industrial engineering skills and knowledge to a wide range of problems in a wide range of industries;

- Continue their education, for example, in MS, PhD, and MBA programs;

- Obtain additional certifications, such as Professional Engineer, Six Sigma Black Belt, or Certified Manufacturing Engineer; and

- Achieve management positions.

Specific Requirements for the BSIE Degree

Students are required to have earned a cumulative GPA of 2.000 or better in required EN courses.

EN Courses		Titles	Credits
EN	101	Introduction to Engineering	2
EN	103	Problem Solving for Engineers	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	3
EN	231/L	Circuit Analysis I/Lab	5
EN	321	Thermodynamics I	3
EN	324/L	Materials 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/L	Engineering of Manufacturing Processes/Lab	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	486	Senior Seminar	2
EN	488	Industrial Engineering Design	3
Math/Science Electives			3
Technical Electives			3

TOTAL   77

Other Required Courses

Courses		Titles	Credits
MATH	126	Calculus & Analytic Geometry 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		Titles	Credits
EN	101	Introduction to Engineering	2
EN	103	Problem Solving for Engineers	3
EN	107	Engineering Graphics	2
ENG	101	Composition I	3
ENG	102	Composition II	3
MATH	126	Calculus & Analytic Geometry I	5
MATH	224	Calculus & Analytic Geometry II	5
PHYS	221/L	General Physics I/Lab	5
General Education			3

TOTAL   31

Sophomore Year

Courses		Titles	Credits
EN	211	Engineering Mechanics I 3
EN	212	Engineering Mechanics II 3
EN	215	Introduction to Industrial and Systems Engineering...........................3
EN	231/L	Circuit Analysis I/Lab 5
EN	324/L	Materials 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.........................3
SPCOM	103	Speaking & Listening 3
General Education...3

TOTAL 34

Junior Year

Courses		Titles	Credits
EN	321	Thermodynamics I 3
EN	343	Engineering Economy.........................3
EN	365	Stochastic Systems Engineering 4
EN	420	Simulation Experiments 4
EN	439	Time and Motion Studies 2
EN	441/L	Engineering of Manufacturing Processes/Lab 4
EN	443	Quality Control and Reliability...............3
EN	471	Operations Research...........................3
General Education 3
Math/Science 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	486	Senior Seminar....................................2
EN	488	Industrial Engineering Design...............3
Technical Electives..3
General Education 6

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/L	General Physics II/Lab 5
EN	103	Problem Solving for Engineers 3
EN	211	Engineering Mechanics I 3
EN	212	Engineering Mechanics II 3
EN	231/L	Circuit Analysis I/Lab 5
EN	321	Thermodynamics I 3
EN	324/L	Materials Science and Engineering/Lab 4
Humanities, Social Sciences & History courses

A student who intends to transfer elsewhere and then decides to stay at CSU-Pueblo will be able to count all of the above courses toward the BSE-Mechatronics or the BSIE.

MINOR IN ENGINEERING

The Engineering minor is appropriate for students who want to add knowledge of engineering to their study of a technical field, such as chemistry, mathematics, or physics. The courses in the minor have prerequisites (calculus and physics) that are not listed below.

Specific Requirements for the Minor in Engineering

Courses		Titles	Credits
EN	101	Introduction to Engineering...................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

Courses		Titles	Credits
EN	101	Introduction to Engineering	2
EN	103	Problem Solving for Engineers	3
EN	107	Engineering Graphics	2
EN	215	Introduction to Industrial and Systems Engineering	3
EN	343	Engineering Economy	3

PLUS three of the following:

EN	420	Simulation Experiments	4
EN	439	Time and Motion Studies	2
EN	440	Safety Engineering	3
EN	441/L	Engineering of Manufacturing Processes/Lab	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

TOTAL   21-24

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 encouraged 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. The Department periodically sets goals for and reviews the section-by-section performance of students on the FE. The results are used to identify areas of the curriculum that may need improvement.

EXERCISE SCIENCE, HEALTH PROMOTION, AND RECREATION DEPARTMENT

Department Chair: Roger Clark

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

The mission of the Department of Exercise Science, Health Promotion, and Recreation is to prepare students for professional positions and leadership roles in Athletic Training and Exercise Science, Health Promotion, and Recreation through experiential educational opportunities that promote wellness and healthy lifestyles. The EXHPR department awards two degrees:

- A Bachelor of Science degree in Athletic Training (AT)

    Or

- A Bachelor of Science degree in Exercise Science, Health Promotion, and Recreation (EXHPR). The BS in Exercise Science, Health Promotion, and Recreation (EXHPR) program currently includes five emphasis of study:

  - General Exercise Science
  - Health Promotion/Wellness
  - Physical Education K-12 Teacher Preparation
  - Community/Commercial Recreation
  - Outdoor Leadership

Department Vision

The EXHPR Department's vision is to provide students with a broad-based theoretical foundation supported by laboratory and field experiences that allow individual observations, inferences, and hands-on mastery of skills related to the promotion of wellness and healthy lifestyles. This vision is accomplished by creating effective professional learning opportunities based on the following conceptual hierarchy of learning skills: Information Retrieval, Conceptual Understanding, Information Analysis, Critical Thinking, Development of Relevant Skill, and Practical Application of Ideas. In so doing we prepare student to become productive, accountable, ethical, and responsible professionals.

General Requirements

All departmental Majors are required to:

- Complete an EXHPR emphasis of study with a cumulative GPA of 2.50 or higher or the Athletic Training major with a cumulative GPA of 2.75 or higher;

- Earn a minimum grade of a "C" in all prerequisite and major courses;

- Repeat prerequisite and major courses with a grade of "D" or lower until a grade of "C" or higher is achieved; and

- Earn a cumulative GPA of 2.0 or higher in required English and speech communication courses.

ATHLETIC TRAINING

http://ceeps.colostate-pueblo.edu/exhpr/athletic_training.htm

Student Learning Outcomes

Athletic Training major graduates 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.

Graduates of the Athletic Training degree program 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.

Specific Requirements for the Athletic Training Major

Core Course Requirements for Athletic Training

Courses		Titles	Credits
AT	101	Introduction to Athletic Training	2
BIOL	112	Nutrition	3
EXHP	162	Personal Health	3
EXHP	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
AT	443	Administration in Athletic Training	3
		TOTAL	25

Required Major Courses

Courses		Titles	Credits
AT	231	CPR/AED for the Professional Rescuer	1
AT	232	First Aid	2
AT	260	Care and Prevention of Athletic Injuries	3
AT	279	Practicum in Athletic Training I	2
AT	323	Functional Exercise Training	2
AT	330	Lower Extremity Evaluation	3
AT	331	Upper Extremity Evaluation	3
AT	332	Head, Neck and Spine Evaluation	3
AT	339	Clinical Pathology & Assessment	3
AT	379	Practicum in Athletic Training II	1
AT	389	Practicum in Athletic Training III	1
AT	419	Athletic Training Field Experience	8
AT	430	Therapeutic Modalities	3
AT	431	Therapeutic Exercise	3
EXHP	436	Exercise Assessment & Leadership	3
AT	479	Practicum in Athletic Training IV	1
AT	489	Practicum in Athletic Training V	1
AT	488	BOC Test Prep	1
		TOTAL	44

Other Required Courses

Courses		Titles	Credits
BIOL	223	Human Physiology & Anatomy I	3
BIOL	223L	Human Physiology & Anatomy I Lab	1
BIOL	224	Human Physiology & Anatomy II	3
BIOL	224L	Human Physiology & Anatomy II Lab	1
CIS	100	Intro to Word and Windows	1
CIS	103	PowerPoint and Web Publishing	1
CIS	104	Excel Spreadsheets	1
ENG	101	Composition I	3
ENG	102	Composition II	3
MATH	121	College Algebra	4
PSYCH	151	Human Development	3
		OR	
PSYCH	100	General Psychology	3
SPCOM	103	Speaking and Listening	3
General Education: History			3
General Education: Humanities			6
General Education: Social Science			3
		TOTAL	39

Hours Outside Major 12

Total credit hours 120

Accreditation

The Colorado State University-Pueblo Athletic Training Education Program is accredited by the Commission on Accreditation of Athletic Training Education (C.A.A.T.E.).

Competitive Admission Policy

The Athletic Training Education Program is highly competitive. Entry into the upper division courses and the clinical portion of the curriculum is not guaranteed upon completion of the pre-professional phase (the first two years of coursework). The determining factors include the success of the pre-professional experience, meeting all academic prerequisites, and number of students enrolled in the program. The number of students admitted into the program varies from year to year.

Application Criteria/Procedure

The following criteria must be met to be considered for admission into the upper division courses and the clinical portion of the Colorado State University-Pueblo Athletic Training Education Program (ATEP)

- Completion of the Colorado State University-Pueblo Athletic Training Education Application. The student can obtain the application form from the program director. Completed applications are due to the program director by March 1st;

- Completion of AT 101, 231, 232, 260, 279, BIOL 223, 223L and BIOL 224, 224L. (AT 232, 260 and 279 with a B or higher, all others with a C or higher grade);

- An overall grade point average of 2.75 or higher;

- A declared Athletic Training major;

- Proof of current Red Cross First Aid and CPR 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 upper division courses and the clinical portion of the program based upon the student's total rankings on the admission criteria and available slots in the program. All applying students will receive written notification from the program director indicating their acceptance or denial into the 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 upper division courses and the clinical portion of the athletic training education program occurs once a year during the spring semester only. Once accepted into the upper division courses and the clinical portion of the program students must complete 4 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 2.75 or higher overall GPA;

- Earn grades of no less than a B in all Athletic Training (AT) courses.

- Maintain athletic training student liability insurance; and

- Maintain Red Cross First Aid and CPR with AED for the Professional Rescuer certification.

Outcome Assessment Activities for Athletic Training

In addition to assessment, which is inherent in the core/major requirements, prior to receiving clearance for graduation, each Athletic Training major must complete:

- Departmental exit survey and alumni surveys,

- All NATA educational competencies and proficiencies,

- Practicum and fieldwork evaluations,

- Employer surveys, and

- An exit comprehensive examination and assessment of the pass rate for the NATA exam if taken.

EXERCISE SCIENCE AND HEALTH PROMOTION

Student Learning Outcomes

Exercise Science and Health Promotion graduates are expected to:

- Read and interpret scientific journal articles in exercise science and health promotion with application of the scientific methods, statistics, study design, and reporting research;

- Analyze and assess the structure and function of the human body both at rest and during movement, and extrapolate the underlying kinesiological principles governing human movement;

- Apply the physiological principle that guide successful adaption to the development of effective exercise and training activities;

- Demonstrate skills related to first aid, safety and the care/prevention of injuries occurring during physical activity and determine the appropriate application of the skills;

- Develop competence and contribute to practical experience in exercise assessment and the participatory management approach;

- Combine the basic principles of health and behavior with emphasis on the application of nutrition, drug prevention, personal fitness, and prevention concepts in attaining personal wellness and supporting behavior modification;

- Assimilate, integrate, and apply critical concepts and skills acquired in the EXHP program to common professional problems in the fields of interest;

- Exhibit effect oral and written communication regarding subjects related to EXHP; and

- Complete a 400 hour internship, student teaching or fieldwork experience in which skills, critical thinking and problem solving can be practiced.

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 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, pre-medicine, 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 Outdoor Physical Education minor is for students who want to teach adventure education, outdoor skills and lead trips within the structure of K-12 schools and other educational settings.

Specific Requirements for the Exercise Science, Health Promotion Emphases:

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

Core Course Requirements for EXHP Emphasis Areas

Courses		Titles	Credits
EXHP	101	Introduction to EXHPR	2
BIOL	112	Nutrition	3
EXHP	162	Personal Health	3
EXHP	162L	Personal Health Lab	1
EXHP	222	Behavior Facilitation	3
AT	232	First Aid	2
EXHP	343	Measurement and Evaluation	3
EXHP	344	Exercise Physiology	3
EXHP	344L	Exercise Physiology Lab	1
EXHP	364	Kinesiology	3
EXHP	461	Managing Programs in EXHPR	3

TOTAL   27

Emphasis Area Course Requirements

GENERAL EXERCISE SCIENCE

Required Core Courses...27

Required Emphasis Courses

Courses		Titles	Credits
EXHP	201	Drugs and Healthy Lifestyles	3
AT	260	Care and Prevention of Athletic Injuries	3
EXHP	436	Exercise Assessment & Leadership	3
EXHP	494	Field Experience	6
		OR	
EXHP	498	Internship	12

The choice of Internship or Fieldwork in the above area will determine the hours in area below.

13-19 credits from the following with a minimum of 4-10 upper division:

REC	100L	Wilderness Technical Skills	1
REC	102	Mountain Orientation	2
REC	103	Winter Orientation	2
REC	104	Desert Orientation	2
REC	105	Canyon Orientation	2
EXHP	103L	Triathlon	1
EXHP	105L	Snow Sports	1
EXHP	106L	Martial Arts and Self-Defense	1
EXHP	108L	Yoga	1
EXHP	109L	Volleyball	1
EXHP	110L	Weight Training	1
EXHP	111	Commitment to Academic Excellence	1
EXHP	112L	Rock Climbing	1
EXHP	113L	Whitewater Boating	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	2
PSYCH	205	Intro to Sports Psychology	3
EXHP	233	History and Principles of Physical Education and Recreation	2
REC	240	Recreation Program Design	3
EXHP	243	Methods of Rhythmic Activities	2
EXHP	245	Motor Learning and Development	3
REC	249	Challenge Course Leadership	2
REC	270	Outdoor Leadership I	2
AT	279	Practicum in Athletic Training I	2
EXHP	288	Health Promotion Practicum	3
REC	322	Wilderness First Aid	2
AT	323	Functional Exercise Training	2
EXHP	345	Methods of Physical Activities & Games I	2
EXHP	346	Methods Physical Activities & Games II	2
EXHP	348	Methods of Individual and Dual Sports	3
REC	350	Leadership and Ethics	3
REC	360	Outdoor Education	3
REC	375	Research and Evaluation of Recreation	3
EXHP	382	Lifestyle Disease Risk Reduction	3
EXHP	432	Applied Sport & Exercise Psychology	3
EXHP	464	Adapted Physical Education	3
EXHP	470	Methods of Coaching and Officiating	3
EXHP	472	Coaching and Officiating Basketball	2
EXHP	475	Coaching and Officiating Volleyball	2
EXHP	482	Coaching and Officiating Wrestling	2
EXHP	483	Coaching and Officiating Baseball	2
EXHP	484	Coaching and Officiating Soccer	2
REC	485	Recreation Facility Design/ Management	3
EXHP	492	Research	1-3

TOTAL   34

Other Required Courses

Courses		Titles	Credits
BIOL	223	Human Physiology & Anatomy I 3	
BIOL	223L	Human Physiology & Anatomy I Lab 1	
BIOL	224	Human Physiology & Anatomy II 3	
BIOL	224L	Human Physiology & Anatomy II Lab ...1	
CIS	100	Intro to Word and Windows 1	
CIS	103	PowerPoint and Web Publishing...........1	
CIS	104	Excel Spreadsheets..............................1	
ENG	101	Composition I.......................................3	
ENG	102	Composition II......................................3	
MATH	121	College Algebra 4	
PSYCH	151	Human Development.............................3	
		OR	
PSYCH	100	General Psychology..............................3	
SPCOM	103	Speaking and Listening 3	
General Education: History 3			
General Education: Humanities.........................6			
General Education: Social Science 3			

TOTAL   39

Courses Outside the Major..20
(Must include 8 upper division hours if 19 were taken
 in emphasis.)

Total credit hours...120

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 off-campus interpersonal and leadership skill building co-curricular activities; and

7. Letters of recommendation from professionals on- and off-campus.

HEALTH PROMOTION/WELLNESS

http://ceeps.colostate-pueblo.edu/exhpr/health_promotion.htm

Upon graduation, students 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; and

- Develop a community action plan, evaluation plan, market plan, budget plan, and logic model based on assessment date for a population.

Course Requirements for Health Promotion/Wellness Emphasis

Required EXHP Core Courses...27

Required Emphasis Courses

Courses		Titles	Credits
EXHP	201	Drugs and Healthy Lifestyles................3	
EXHP	288	Health Promotion Practicum.................3	
EXHP	336	Community Health 3	
EXHP	362	Evaluation of Current Health Issues 2	
EXHP	382	Lifestyle Disease Risk Reduction 3	
EXHP	436	Exercise Assessment & Leadership 3	
EXHP	485	Methods in Health Promotion 3	
EXHP	487	Health Promotion Program Planning/Evaluation.............................4	
EXHP	498	Internship...12	

MCCNM 210   Intro to Integrated Communication........3
                     OR
MKTG 340   Principles of Marketing 3
                                                    _____
                                                    TOTAL   39

Other Required Courses

Courses		Titles	Credits
BIOL	223	Human Physiology & Anatomy I 3
BIOL	223L	Human Physiology & Anatomy I Lab 1
BIOL	224	Human Physiology & Anatomy II 3
BIOL	224L	Human Physiology & Anatomy II Lab ...1
CIS	100	Intro to Word and Windows 1
CIS	103	PowerPoint and Web Publishing...........1
CIS	104	Excel Spreadsheets..............................1
ENG	101	Composition I.......................................3
ENG	102	Composition II......................................3
MATH	121	College Algebra 4
PSYCH	151	Human Development............................3
		OR
PSYCH	100	General Psychology.............................3
SPCOM	103	Speaking and Listening 3
General Education: History 3
General Education: Humanities..........................6
General Education: Social Science 3

                                                    _____
                                                    TOTAL   39

Courses Outside the Major..15

Total credit hours...120

Outcomes Assessment Activities for Health Promotion/Wellness 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 off-campus 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.

Course Requirements for Physical Education K-12 Teacher Preparation Emphasis

Required EXHP Core Courses.......................................27

Required Emphasis Courses

Courses		Titles	Credits
AT	260	Care & Prevention of Athletic Injuries..3
EXHP	233	History and Principles of Physical Education and Recreation 2
EXHP	243	Methods of Rhythmic Activities.............2
EXHP	245	Motor Learning and Development 3
EXHP	345	Methods of Physical Activities & Games I...2
EXHP	346	Methods Physical Activities & Games II..2
EXHP	347	Methods of Fitness Instruction..............1
EXHP	348	Methods of Individual and Dual Sports 3
EXHP	351	Methods of Teaching Elementary Physical Ed...3

EXHP	478	Methods of Teaching Secondary Physical Education	3

Approved Major Electives...3

Two credits from the following:

EXHP	105L	Snow Sports	1
EXHP	112L	Rock Climbing	1
EXHP	113L	Whitewater Boating	1
EXHP	114L	Basic Mountaineering Techniques	1
EXHP	115L	Skiing	1
EXHP	116L	Camping	1
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

One credit from the following:

EXHP	103L	Triathlon	1
EXHP	104L	Personal Fitness	1
EXHP	106L	Martial Arts and Self-Defense	1
EXHP	108L	Yoga	1
EXHP	109L	Volleyball	1
EXHP	110L	Weight Training	1
EXHP	119L	Walking for Fitness	1
EXHP	120L	Aerobics	1
EXHP	121L	Aerobic Instructor Training	1
EXHP	174L	Tennis	1
EXHP	175L	Racquetball	1
EXHP	470	Methods of Coaching and Officiating	3

One credit from the following:

EXHP	146L	Beginning Swimming	1
EXHP	176L	Life Guard Training	2
EXHP	276L	Water Safety Instructor Certification	2

TOTAL   31

Other Required Courses

BIOL	223	Human Physiology & Anatomy I	3
BIOL	223L	Human Physiology & Anatomy I Lab	1
ED	202	Foundation of Education	3
ED	280	Educational Media and Technology	3
ED	301	Frameworks of Teaching	3
ED	485	Capstone Seminar in Education	2
ED	489	Student Teaching K-12	12
ENG	101	Composition I	3
ENG	102	Composition II	3
EXHP	465	Adapted Physical Education	3
MATH	121	College Algebra	4
PSYCH	151	Human Development	3
		OR	
PSYCH	251	Childhood and Adolescence	
		OR	
PSYCH	342	Educational Psychology	
RDG	435	Content Area Literacy	4

SPCOM	103	Speaking and Listening	3

General Education: History 3
General Education: Humanities 6
General Education: Social Science 3
(providing either PSYCH 151 or 251 was taken above)

TOTAL   62

Total credit hours...120

Please see the *Teacher Education Program* section of this catalog for admission to the Teacher Education Program.

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

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
PSYCH	205	Introduction to Sports Psychology	3

AT	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 and/or	
EXHP	494	Field Experience........................(1-5 VAR)	

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 2	
REC	103	Winter Orientation..........................2	
REC	104	Desert Orientation..........................2	
EXHP	106L	Martial Arts and Self-Defense........1	
EXHP	108L	Yoga 1	
EXHP	109L	Volleyball 1	
EXHP	110L	Weight Training..............................1	
EXHP	112L	Rock Climbing 1	
EXHP	113L	Whitewater Boating........................1	
EXHP	115L	Skiing...1	
EXHP	116L	Camping 1	
EXHP	117L	Backpacking 1	
EXHP	119L	Walking for Fitness 1	
EXHP	120L	Aerobics...1	
EXHP	174L	Tennis...1	
EXHP	175L	Racquetball....................................1	
EXHP	176L	Life Guard Training........................1	
EXHP		300 or higher level student electives...................9	

TOTAL   20

Outdoor Physical Education

Courses		Titles	Credits
REC	100L	Wilderness Technical Skills 1	
REC	249	Challenge Course Leadership 2	
REC	270	Outdoor Leadership I..............................2	
REC	322	Wilderness First Aid...............................2 OR	
EXHP	176L	Life Guard Training................................2	
REC	360	Outdoor Education.................................3	
REC	370	Outdoor Leadership II............................2	

Choose one of the following: 2

REC	102*	Mountain Orientation 2	
REC	103	Winter Orientation...........................2	
REC	104	Desert Orientation 2	
REC	105	Canyon Orientation..........................2	

Six additional credit hours from the following: 6

EXHP	105L	Snow Sports....................................1	
EXHP	113L	Whitewater Boating 1	
EXHP	114L	Basic Mountaineering Techniques ..1	
EXHP	115L	Skiing 1	
EXHP	117L	Backpacking....................................1	
EXHP	276L	Water Safety Instructor Certification 2	
REC	350	Leadership and Ethics.....................3	
REC	484	Outdoor Resources and Management 3	
EXHP	549	Facilitation of Adventure Education ..3	

TOTAL   20

*Students pursuing the WEA Outdoor Leadership Certification must enroll in REC 102 (Mountain Orientation) and complete additional leading experiences as per the certification requirements.

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.

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;

- Acquire and apply 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;

- Recognize problems in the provision of recreation opportunities and assess the success of different organizations in dealing with these;

- Differentiate the process of professionalization currently underway in leisure services and identify the professional organizations that are involved;

- Distinguish and analyze trends, issues and contemporary problems in leisure, recreation, and parks;

- Exhibit effective oral and written communication with an emphasis on group facilitation and leadership;

- Develop a professional résumé and demonstrate effective interviewing skills for use in a competitive job search; and

- Complete a 400 hour internship in which skills, critical thinking and problem solving can be practiced.

Specific Requirements for the Recreation Emphases

Core Course Requirements for the Recreation Emphases

Courses		Titles	Credits
EXHP	101	Introduction to EXHPR	2
REC	240	Recreation Program Design	3
REC	280	Foundations of Therapeutic Recreation	3
REC	350	Leadership and Ethics	3
REC	360	Outdoor Education	3
REC	375	Research and Evaluation of Recreation	3
EXHP	461	Managing Programs in EXHPR	3
REC	493	Seminar	2
REC	498	Internship	12
		OR	
REC	489	Internship in Therapeutic Rec	12

TOTAL 34

Emphasis Course Requirements

OUTDOOR LEADERSHIP
http://ceeps.colostate-pueblo.edu/exhpr/outdoor_adventure_education.htm

Courses	Titles	Credits
Required Recreation Core Courses		34

Four credits from the following list:			4
EXHP	105L	Snow Sports	1
EXHP	113L	Whitewater Boating	1

EXHP	114L	Basic Mountaineering Techniques	1
EXHP	115L	Skiing	1
EXHP	116L	Camping	1
EXHP	117L	Backpacking	1
REC	100L	Wilderness Technical Skills	1
REC	102	Mountain Orientation	2
REC	104	Desert Orientation	2
REC	103	Winter Orientation OR	
REC	105	Canyon Orientation	2
REC	249	Challenge Course Leadership	2
REC	270	Outdoor Leadership I	2
REC	322	Wilderness First Aid	2
REC	370	Outdoor Leadership II	2
REC	388	Outdoor Leadership Practicum	3
REC	484	Outdoor Resources & Management	3

TOTAL 59

Hours Outside the Major 20
(at least 4 upper division credits)

Elective Courses 6
(CIS 100, 103, & 104 recommended. Take 3 additional credits if CIS 100-104 is taken. EXHP 176L is also recommended.)

General Education Requirements 35

Courses		Titles	Credits
ENG	101	Composition 1	3
ENG	102	Composition II	3
MATH			3
Social Sciences			6
Humanities			6
SPCOM 103		Speaking and Listening	3
History			3
Natural and Physical Science			8

Total credit hours... 120

COMMUNITY COMMERCIAL RECREATION
http://ceeps.colostate-pueblo.edu/exhpr/community_commercial_rec.htm

Courses		Titles	Credits
Required Recreation Core Courses			34
REC	250	Commercial Recreation and Tourism	3
REC	389	Community/Commercial Rec Practicum	3
REC	484	Outdoor Resources and Management	3
MCCNM	210	Intro to Integrated Communication	3
MGMT	201	Principles of Management	3
MGMT	318	Human Resource Management	3
MKTG	340	Principles of Marketing	3
MKTG	342	Promotional Strategy OR	3

MKTG	345	Retail Management	3
		OR	
MKTG	348	Consumer Behavior	3

TOTAL   58

Hours Outside the Major 20
(at least 4 upper division credits)

Elective Courses 7
(CIS 100, 103, & 104 recommended. Take 4 additional
credits if CIS 100-104 is taken. Also recommended are
AT 232 and EXHP 176L.)

General Education Requirements..............................35

Courses		Titles	Credits
ENG	101	Composition 1	3
ENG	102	Composition II	3
MATH			3
Social Sciences			6
Humanities			6
SPCOM	103	Speaking and Listening	3
History			3
Natural and Physical Science			8

Total credit hours......................................120

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 off-campus interpersonal and leadership skill building co-curricular activities; and

  4. Letters of recommendation from professionals' on-and-off campus.

RECREATION MINORS

Two minors are available in Recreation:

- The Recreation minor 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.

- 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.

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;

Fitness and Recreational Sports Management Minor

Courses		Titles	Credits
ACCTG	201	Financial Accounting	3
MGMT	201	Principles of Management	
		OR	
EXHP	461	Managing Programs in EXHPR	3
MGMT	318	Human Resources Management	
		OR	
MGMT	349	Management of Service Businesses	3
REC	240	Recreation Program Design	3
REC	485	Recreation Facility Design/ Management	3

Choose two of the following: 6			
REC	250	Commercial Recreation and Tourism	3
REC	484	Outdoor Resources and Management	3
MGMT	349	Management of Service Businesses	3
MGMT	365	Management Information Systems	3
MKTG	342	Promotional Strategy	3
MKTG	348	Consumer Behavior	3

TOTAL   21

Recreation Minor: Specific Requirements

Courses		Titles	Credits
EXHP	101	Introduction to EXHPR	2
EXHP	461	Managing Programs in EXHPR	3
REC	240	Recreation Program Design	3
REC	280	Foundations of Therapeutic Recreation	3
REC	360	Outdoor Education	3
REC	375	Research and Evaluation of Recreation	3
REC	389	Community/Commercial Rec Practicum	3
		TOTAL	**20**

WILDERNESS EDUCATION LEADERSHIP PROGRAM

An integral component of the Outdoor Pursuits program is our affiliated Wilderness Education Association (WEA) program. We utilize the eighteen-point curriculum of WEA in our academic courses as well as a framework with our recreation adventures. Students who participate in Outdoor Pursuits have the opportunity to be certified through the Wilderness Education Association as an outdoor leader. This process requires the student to take specific outdoor adventure education courses at CSU-Pueblo, go on at least five extended trips, be a Wilderness First Responder, and lead at least two trips as a student leader.

NURSING DEPARTMENT

Associate Dean: Dr. Donna Wofford

Undergraduate Coordinator: Ruth DePalma

Graduate Coordinator: Joe Franta

Faculty: Brumfield, Cerankowski, Chen, Crownover, Deniro, Galloway, McClure, Nichols, Rooney, Samaras, 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), 3343 Peachtree Rd NE, Suite 500, Atlanta, GA 30326.

State Board Approval

The CSU-Pueblo Department of Nursing baccalaureate educational program is fully approved by the Colorado Board of Nursing.

The Bachelor of Science in Nursing Program

The Colorado State University-Pueblo Department of Nursing offers an undergraduate program that confers a Bachelor of Science in Nursing (BSN). The undergraduate program offers several options for the basic nursing student (Basic BSN), the registered nurse (RN-BSN), licensed practical nurse (LPN-BSN), degree plus students to BSN (Accelerated-BSN), and the paramedic (Paramedic-BSN) to obtain their BSN degree. The Basic BSN is an option developed for the student who has completed prerequisite courses and has no degree,

certificate or license. The RN-BSN option is developed for an associate degree or diploma nurse with a license to complete their BSN. The student with another baccalaureate or masters degree may apply to the Degree Plus to BSN option or the Basic BSN. Licensed practical nurses that have a nursing license or completed an accredited program may apply for the LPN-BSN or Basic BSN option. The paramedic may elect to apply for the Paramedic-BSN or Basic BSN option. The BSN program also offers an elective concentrated clinical practicum in nursing. The elective practicum allows the student to explore their passion in clinical practice.

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 and ACT/SAT scores will have priority selection. Preference is given to students graduating from Southern Colorado high schools and/or Health Academy programs. In order to be admitted directly in to the program as a freshman, students must:

- Demonstrate proof of high school diploma. Students must show proof of 3 years of science, including

biology and chemistry and proof of algebra or equivalent.

- Have a cumulative 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. Fifty percent of the percentage of prerequisites and general education courses must be completed by the admission deadline. Additional consideration will be given to students completing their prerequisite and general education coursework here at CSU-Pueblo. For the basic nursing student admission:

- Requirements are a minimum GPA of 3.00 for all required general education and prerequisites. All prerequisites must be passed with a C or better (C- is not acceptable) and be completed prior to the semester of entrance into the nursing program. If a student receives a grade less than C in a nursing prerequisite course, that course may be repeated one (1) time only.

- All general education must be completed prior to the semester of entrance into the nursing program.

- The student needs to be admitted to CSU-Pueblo first, and then submit a separate application to the nursing program the year prior to the spring (traditional) or summer (accelerated) 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 nursing program they must attend a mandatory orientation.

The following must be submitted through nursing tracking system after receiving a personal identification number from the University and instructions from the Department of Nursing prior to orientation. Failure to do so will result in loss of admission status.

- Background check per Colorado Law. (House bill 97-1084).

- A urine drug screen no more than 30 days prior to nursing orientation date.

- Current certification in CPR (Health Care Provider-C or equivalent).

- Current physical examination within the last year and current immunization records. This must include the Hepatitis B series, Measles, Mumps and Rubella, Varicella, Tetanus, and a 2 step TB test.

The following must be submitted to the Department of Nursing prior to orientation:

- Submit current unofficial transcripts showing completion of all prerequisite and general education classes.

- Return receipt for program acceptance by stated deadline.

Acceptance of Transfer Credit

Transfer credit will be awarded per the published *Academic Policies* section of this catalog. Credit will be awarded for a course in which a grade of C or better was earned. Grades of C- are not accepted for any nursing or nursing prerequisite course. Requests for transfer of nursing credit are evaluated on an individual basis.

Time Limits

For applicants to all options (except the RN to BSN), Anatomy & Physiology I & II, Intro to Human Development completed and Pathophysiology (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. 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 pre-nursing 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 regularly-scheduled time and place, the rest of the time is spent online. Both parts of the course, classroom attendance and online work, are mandatory.

Students are expected to subscribe to an email discussion list, communicate on a regular basis with the instructor, and collaborate extensively with others in their class.

In order to take a hybrid course, the student must have access to a computer so they can send and receive email, find information on the Internet, and participate in online discussions. Basic instruction in computers or the Internet will not be provided.

General Education and Prerequisites Courses

Courses		Titles	Credits
ENG	101	Composition I	3
ENG	102	Composition II	3
SPCOM	103	Speaking and Listening	3
BIOL	206/L	Introduction to Microbiology/Lab	4
BIOL	223/L	Human Physiology & Anatomy I/Lab	4
BIOL	224/L	Human Physiology & Anatomy II/Lab	4
CHEM	111/L	Principles of Chemistry/Lab	4
MATH	156	Introduction to Statistics	3
NSG	207	Nursing Pathophysiology	3
PSYCH	151	Human Development	3
History		Per Gen. Ed. Requirement	3
Foreign Language			3
Humanities		Per Gen. Ed. Requirement	3
Social Science		Per Gen. Ed. Requirement	3

TOTAL 46

NSG 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

TOTAL   74

Elective Concentrated Clinical Practicum

The elective concentrated clinical practicum allows the student enrolled in the Basic options to choose an area of clinical concentration during their progression through the program. The student will meet with their advisor and course coordinator to develop their plan.

Summer - Junior

NSG   372   Clinical Practicum I 3

Spring - Senior

NSG   472   Clinical Practicum II 3

Basic BSN Option Program Plan

Freshman - Fall

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

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/L	Principles of Chemistry/Lab	4
NSG	207	Nursing Pathophysiology	3
History		Per Gen. Ed. Requirement	3

TOTAL   14

Sophomore - Spring

Courses		Titles	Credits
NSG	231	Concepts for Professional Nursing	2
NSG	232/L	Fundamentals of Nursing Care/Lab	7
NSG	302/L	Health Promotion & Assessment/Lab	3
NSG	331	Healthy Aging	2
NSG	371	Healthcare Informatics	2

TOTAL   16

Junior - Fall

Courses		Titles	Credits
NSG	308	Pharmacology in Nursing Practice	3
NSG	312/L	Caring for Childbearing Family/Lab OR	
NSG	332/L	Caring for Children/Families/Lab	6
NSG	382/L	Dynamics of Behavioral Health/Lab	6

TOTAL   15

Junior - Spring

Courses		Titles	Credits
NSG	322/L	Caring for Adults I/Lab	8
NSG	312/L	Caring for Childbearing Family/Lab OR	
NSG	332/L	Caring for Children/Families/Lab	6
NSG	351	Evidence Based Nursing Research	3

TOTAL   17

Senior - Fall
(Graduation Planning Due)

Courses		Titles	Credits
NSG	420/L	Caring for Adults II/Lab	8
NSG	442/L	Global Public Health/Lab	6

TOTAL   14

Senior - Spring

Courses		Titles	Credits
NSG	451	Nursing Leadership & Issues	3
NSG	452/L	Comprehensive Nursing Practice/Lab	9

TOTAL   12

Licensed Practical Nurses Bachelor of Science in Nursing Option (LPN-BSN)

Licensed practical nurses who wish to obtain their Bachelor of Science in Nursing degree may do so through the LPN-BSN option. To qualify for this option the student must apply thru the regular nursing application process.

LPN-BSN Option Admission Requirements

In addition to the undergraduate program admission requirements, the applicant for this option will:

- Bring the actual license of certificate to the Department of Nursing for faculty visualization and photocopying prior to the start of the first nursing class.

- Receive seven escrow credits for NSG 232/232L, awarded for LPN credits.

Program of Study

The pre-nursing advisor will meet with the student to plan a program of study for the LPN-BSN option. The program of study will include 46 credit hours of prerequisite courses (see Basic BSN), and 74 credit hours of nursing courses. The licensed practical nurse may transfer in seven nursing escrow credit hours per the articulation agreement.*

LPN-BSN Option Program Plan

Prerequisite Courses
(See Basic BSN)

Spring or Summer

Courses		Titles	Credits
NSG	231	Concepts for Professional Nursing	2
NSG	232/L*	Fundamentals of Nursing Care/Lab	7
NSG	302/L	Health Promotion & Assessment/Lab	3
NSG	331	Healthy Aging	2
NSG	371	Healthcare Informatics	2
		TOTAL	16

Junior - Fall

Courses		Titles	Credits
NSG	308	Pharmacology in Nursing Practice	3
NSG	312/L	Caring for Childbearing Family/Lab OR	
NSG	332/L	Caring for Children/Families/Lab	6
NSG	382/L	Dynamics of Behavioral Health/Lab	6
		TOTAL	15

Junior - Spring

Courses		Titles	Credits
NSG	322/L	Caring for Adults I/Lab	8
NSG	312/L	Caring for Childbearing Family/Lab OR	
NSG	332/L	Caring for Children/Families/Lab	6
NSG	351	Evidence Based Nursing Research	3
		TOTAL	17

Senior - Fall
(Graduation Planning Due)

Courses		Titles	Credits
NSG	420/L	Caring for Adults II/Lab	8
NSG	442/L	Global Public Health/Lab	6
		TOTAL	14

Senior - Spring

Courses		Titles	Credits
NSG	451	Nursing Leadership & Issues	3
NSG	452/L	Comprehensive Nursing Practice/Lab	9
		TOTAL	12

Registered Nurse to Bachelor of Science in Nursing Option (RN-BSN)

RN-BSN Admissions Requirements

Students must meet basic nursing program admission requirements and for the RN-BSN option which is governed by the "Colorado Articulation Model." See Basic BSN for after admission requirements. The RN-BSN student applications are taken year round. The student must have:

- 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

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. Courses are offered face to face, on-line, and hybrid. The student may choose from several program plans to meet their busy schedules. The RN-BSN option will include 33 credit hours 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 transfer in 43 prerequisite credits along with 33 RN credits for a total of 76 credit hours. This applies only to the students in the RN to BSN program.

Nursing Transfer/Escrow..33

Prerequisite Courses (excluding NSG 207) 43

General Education and Prerequisites Courses
(Excluding NSG 207)

Courses		Titles	Credits
ENG	101	Composition I..3
ENG	102	Composition II.......................................3
SPCOM	103	Speaking and Listening 3
BIOL	206/L	Introduction to Microbiology/Lab 4
BIOL	223/L	Human Physiology & Anatomy I/Lab 4
BIOL	224/L	Human Physiology & Anatomy II/Lab.....4
CHEM	111/L	Principles of Chemistry/Lab 4
MATH	156	Introduction to Statistics.......................3
PSYCH	151	Human Development...........................3
History		Per Gen. Ed. Requirement 3
Foreign Language		3
Humanities		Per Gen. Ed. Requirement 3
Social Science		Per Gen. Ed. Requirement 3

TOTAL   43

RN-BSN Courses

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

TOTAL   44

RN-BSN Option Program Plan

Prerequisite Courses
(See Basic BSN - excluding NSG 207)

Fall - Junior

Courses		Titles	Credits
NSG	307	Health and Disease Systems................3
NSG	309	Professional Nursing Practice...............4
Approved electives (lower or upper division).....................4

TOTAL   11

Spring - Junior

Courses		Titles	Credits
NSG	311	Concepts for Professional Nursing 4
NSG	351	Evidence Based Nursing Practice 3
NSG	371	Healthcare Informatics..........................2

TOTAL   9

Summer - Junior

Courses		Titles	Credits
NSG	302/L	Health Promotion & Assessment/Lab ...3
NSG	331	Healthy Aging 2

TOTAL   5

Fall - Senior

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

TOTAL   7

Spring - Senior

Courses		Titles	Credits
NSG	451	Nursing Leadership & Issues................3
NSG	452/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 pre-nursing 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 full-time. 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	Human Physiology & Anatomy I/Lab	4
BIOL	224/L	Human Physiology & Anatomy II/Lab	4
CHEM	111/L	Principles of Chemistry/Lab	4
MATH	156	Introduction to Statistics	3
NSG	207	Pathophysiology	3

PSYCH 151 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

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

Paramedic to Bachelor in Nursing Accelerated Option (Paramedic-BSN)

The Paramedic to BSN option allows the paramedic who has graduated from an accredited program to complete their BSN. The applicant must have completed the necessary prerequisite courses prior to starting the program.

Previous coursework necessary for admission to the Paramedic to BSN includes the natural, social, and behavioral sciences. The students participate in a reality-based 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 full-time.

Prerequisite and General Education Courses

Courses		Titles	Credits
ENG	101	Composition I	3
ENG	102	Composition II	3
SPCOM	103	Speaking and Listening	3
BIOL	206/L	Introduction to Microbiology/Lab	4
BIOL	223/L	Human Physiology & Anatomy I/Lab	4
BIOL	224/L	Human Physiology & Anatomy II/Lab	4
CHEM	111/L	Principles of Chemistry/Lab	4
MATH	156	Introduction to Statistics	3
NSG	207	Nursing Pathophysiology	3
PSYCH	151	Human Development	3
History		Per Gen. Ed. Requirement	3
Foreign Language			3
Humanities		Per Gen. Ed. Requirement	3
Social Science		Per Gen. Ed. Requirement	3
		TOTAL	46

Program Plan

Summer

Courses		Titles	Credits
NSG	231	Concepts for Professional Nursing	2
NSG	232/L	Fundamentals of Nursing Care/Lab	7
NSG	302/L	Health Promotion & Assessment/Lab	3
NSG	308	Pharmacology in Nursing Practice	3
NSG	331	Health Aging	2
		TOTAL	17

Fall

Courses		Titles	Credits
NSG	312/L	Caring for Childbearing Family/Lab	6
NSG	322/L	Caring for Adults I/Lab	8
NSG	332/L	Caring for Children/Families/Lab	6
		TOTAL	20

Spring

Courses		Titles	Credits
NSG	351	Evidence Based Nursing Practice	3
NSG	382/L	Dynamics of Behavioral Health/Lab	6
NSG	420/L	Caring for Adults II/Lab	8
NSG	371	Healthcare Informatics	2
		TOTAL	19

Summer

Courses		Titles	Credits
NSG	442/L	Global Public Health/Lab	6
NSG	451	Nursing Leadership & Issues	3
NSG	452/L	Comprehensive Nursing Practice/Lab	9
		TOTAL	18

TEACHER EDUCATION PROGRAM

Associate Dean: Dr. Victoria Marquesen

Faculty: Checho, Massey, Peters, Pettit, Piazza, Piquette, 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 campus-wide 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 broad-based 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:

- Art (K-12)
- Elementary Education (K-6)
- English (7-12)
- Foreign Languages (7-12) –Spanish
- Mathematics (7-12)
- Music (K-12)
- Physical Education (K-12)
- Science (7-12)
- Social Studies (7-12)

See the Teacher Education Handbook for add-on endorsements that have been approved by the Colorado Department of Education in K-12: Instructional Technology, Linguistically Diverse Education, and Special Education.

Selective Entry and Retention in Teacher Education Admission

Many education courses require the prerequisite of admission to education (see description of courses). Students complete the admission to education process during ED 301: Frameworks of Teaching. The entire process for gathering information and submitting it to faculty is completed during the course.

The following are the requirements that must be met to be admitted to teacher education. No exceptions can occur to these requirements:

1. Cumulative grade point of 2.600 or greater.

2. Completion of ENG 101 and 102 with grades of C or better.

3. Completion of MATH 109 or math course required by major field. A grade of B or better is required in MATH 109 or MATH 360; a grade of C or better is required in MATH 121, 124, 126, or 221. Students who complete both MATH 109 and MATH 156 or MATH 360 and MATH 361 prior to admission may be admitted with grades of C or better in both courses.

4. Completion of SPCOM 103 with a grade of B- or better, or, students completing SPCOM 103 with a C or degree plus students may complete this competency through the Oral Proficiency Exam.

5. Completion of ED 301 with a grade of C or better.

6. Completion of a formal, standardized test during ED 301 such as the Proficiency Profile and a writing sample.

7. Completion of satisfactory background check with the Colorado Bureau of Investigation. Background check is sent to the Colorado Department of Education and report must meet the criteria required for obtaining a teaching license in Colorado as outlined in 22-60.5-103 C.R.S.

8. Completion of an education portfolio. Six types of materials will be submitted with the portfolio: 1) transcripts and official documents demonstrating students performance in University classes, 2) materials developed in University classes which demonstrate proficiency on specific education standards, 3) recommendations and evaluations from teachers, 4) materials used in field experiences and videos of teaching, 5) personal reflections and summaries about progress, and 6) results of formal tests. Specific portfolio requirements and manner of evaluation are included in the appendices to the *Teacher Education Handbook.* All portfolios will be submitted in electronic format (website).

Retention

Students must maintain a cumulative GPA of 2.600 and must continue to make progress towards proficiency on program standards to remain in the teacher education program. Additional details related to program retention are included in the *Teacher Education Handbook.*

Student Teaching

Student teaching provides opportunities to integrate theory with practice. Prior to being approved for a student teaching assignment, the following requirements must be met:

1. Completion of all course work including courses in the content area and education.

2. Cumulative GPA of 2.600.

3. GPA of 2.500 in the academic major.

4. Grades of C or higher in all courses required for licensure.

5. Passing score on the content exam in the student's licensure area, required by the State of Colorado.

6. 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.

8. Completion of any support plans.

9. Submission of current satisfactory background check from the Colorado Bureau of Investigation.

Applications must be submitted a semester in advance; the deadline for the application is the same as the deadline for the Graduation Planning Sheet.

Student teaching requires full time effort; therefore students may not enroll in University courses other than Student Teaching and Capstone Seminar.

Teacher Licensure

At completion of student teaching, the University Supervisor will recommend the student teacher for licensure. This recommendation is required for the institutional recommendation for successful program completion and recommendation to the Colorado Department of Education for a teaching license. Recommendation for licensure is not required for completion of the education minor.

Specific Requirements for the Elementary Teaching Endorsement

CSU-Pueblo requires the student interested in Elementary Education to complete a Liberal Studies major in addition to the courses in Education listed below.

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 Reading	3
	PREREQUISITES- Admission to Education; GPA of 2.6	

Courses	Titles	Credits
RDG 411	Teaching Elementary Language Arts	2
	PREREQUISITES- Admission to Education; GPA of 2.6	
ED 412	Teaching Diverse Learners	3
	PREREQUISITES- Admission to Education; GPA of 2.6	
ED 413	Teaching Elementary Social Studies	2
	PREREQUISITES-Admission to Education; GPA of 2.6	
ED 414	Teaching Elementary Science & Health	2
	PREREQUISITES-Admission to Education; GPA of 2.6	
ED 417	Teaching Mathematics in Elementary School	2
	PREREQUISITES- Admission to Education: GPA of 2.6; Completion of Liberal Studies Math Block.	
ED 485	Capstone Seminar in Education	2
	PREREQUISITES-Admission to Student Teaching. Must be taken with student teaching	
ED 487	Student Teaching Elementary	12
	PREREQUISITES- Admission to Student Teaching	

TOTAL 40

Specific Requirements for the Secondary and K-12 Teaching Endorsements

The student must complete an appropriate major and the following Education courses:

Courses	Titles	Credits
One of the following PSYCH courses:		3
PSYCH 151	Human Development	
	PREREQUISITES-None	
	OR	
PSYCH 251	Childhood and Adolescence	
	PREREQUISITES-PSYCH 100	
	(Music students are required to take PSYCH 251)	
	OR	
PSYCH 342	Educational Psychology	
	PREREQUISITES-PSYCH 100 or 151	
ED 202	Foundations of Education	3
	PREREQUISITES-None	

ED   280   Educational Media and Technology 3
              PREREQUISITES-None
              (Music Education students may complete
               MUS 103 and 306 for ED 280)

ED   301   Frameworks of Teaching............................3
              (Admission to Education is
              completed in this course)
              PREREQUISITES-Completion of 45
              college hours and a cumulative GPA
              of 2.6

RDG   435   Content Area Literacy 4
              PREREQUISITES-Admission to
              Education; GPA of 2.6

Special Methods in Endorsement Areas 4-6
              PREREQUISITES-Admission to
              Education; GPA of 2.6

ED   412   Teaching Diverse Learners*.......................3
              PREREQUISITES-Admission to
              Education: GPA of 2.6

ED   485   Capstone Seminar in Education.................2
              PREREQUISITES-Admission to
              Student Teaching. Must be taken
              with student teaching.

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

                                        _____
                                        TOTAL   37-39

*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.

LIBERAL STUDIES PROGRAM
(Major for Elementary Education)

Dr. Victoria Marquesen, Coordinator

The Liberal Studies major, which leads to a B.S. degree, is intended to provide a strong liberal arts education for future elementary education teachers. Core requirements build upon students' experiences in General Education to provide both breadth and depth in the arts and humanities, English, math, sciences, and social sciences. Required courses provide support in each area of the Colorado *K-6 Model Content Standards.* Students are required to select an area of concentration or emphasis for an additional 12 hours of study. Areas of concentration may be chosen from Art, Chicano Studies, English, Health, History, Language and Linguistics, Leadership, Math, Modern Foreign Languages, Music, Political Science, Psychology, Science, and Sociology.

This degree is approved for students in Elementary Education. Students completing the Liberal Studies major are **required** to minor in Education.

Program Goals

At CSU-Pueblo, teacher education is a campus wide responsibility, and overall program goals reflect components of both the Liberal Studies major and Education minor. It is the purpose of the Liberal Studies major to assure that students will develop breadth and depth of knowledge of the liberal arts, and it is the responsibility of the Education minor to assure students become proficient at transforming this knowledge into curriculum and instruction for young children.

It is the joint responsibility of both the major and minor to prepare future teachers to evaluate information critically, to study and research independently, and to communicate knowledge effectively. The following four program goals have been established for the Liberal Studies Degree. Goal 1 is largely the responsibility of the Liberal Studies major and Goal 4 the responsibility of the Elementary Education minor; benchmarks for Goals 2 and 3 have been designed across the entire degree program.

1. Acquisition of Knowledge. Graduates are broadly educated in the liberal arts and sciences:

- Understanding the significant ideas, concepts, structures and values within disciplines, including theoretical, ethical, and practical implications.

- Mastering content knowledge in all areas taught in elementary schools: the arts, math literature and language, social sciences, sciences, and human development and learning.

- Balancing a breadth of knowledge in the liberal arts and sciences with depth of knowledge within a discipline.

2. Construction of Knowledge. Graduates demonstrate habits of thinking, including analytical skills, independent thinking, reasoned judgment, mature values, and imagination:

- Utilizing the tools of inquiry of the humanities, arts, mathematics, and behavioral, social, and natural sciences to understand and evaluate ideas.

- Developing habits of critical intellectual inquiry, including self-direction and self-reflection.

- Making connections from different intellectual perspectives and multiple viewpoints to form cross-disciplinary connections.

- Utilizing research skills of the liberal arts and sciences, including library and data retrieval skills, to study and evaluate information.

3. Communication of Knowledge. Graduates communicate effectively:

- Writing clearly in a variety of academic and practical formats.

- Speaking effectively in a variety of settings.

- Utilizing technology as a tool to inform and communicate.

4. Application of Knowledge. Graduates create standards-based learning experiences that make knowledge accessible, exciting, and meaningful for all students:

- Using multiple representations and explanations of disciplinary concepts that capture key ideas and link them to students' prior understandings.

- Using different viewpoints, theories, "ways of knowing,' and methods of inquiry in teaching of subject matter content.

- Evaluating curriculum for their comprehensiveness, accuracy, and usefulness for representing particular ideas and concepts.

- Engaging students in generating knowledge and testing hypotheses according to the methods of inquiry and standards of evidence used in the discipline

- Developing and using curricula that encourage students to see and interpret ideas from diverse perspectives.

- Creating interdisciplinary learning experiences that allow inquiry from several subject areas.

Program Design

The program is planned as a coherent whole, with four components:

1. General Education

Specific **General Education** courses form the foundation of knowledge for all students with this major. These courses fulfill CSU-Pueblo graduation requirements and are essential to meet many of the content standards for elementary teachers. Courses in the arts and humanities, English, math, history, sciences, and social sciences contribute to the General Education core.

2. Liberal Studies Core

Liberal Studies Core requirements build upon students' experiences in General Education to provide both breadth and depth to the program to meet program goals. Emphasis is placed on each area relative to K-6 content standards to assure depth of knowledge in the humanities, social sciences, math, and sciences.

3. Liberal Studies Area of Emphasis in a Specific Discipline

Students are required to select an area of concentration or emphasis and, in consultation with an advisor, develop a plan for study for an additional 12 hours in Liberal Studies. The plan should include goals to be achieved by the concentration and the sequence of courses to achieve the goals. Areas of concentration may be chosen from art, Chicano Studies, English, Health, History, Language and Linguistics, Math, Modern Foreign Languages, Music, Political Science, Psychology, Science, and Sociology. Elementary Education has special requirements for admission and retention. Please refer to the section in the catalog for this information.

4. Education Minor

All students must complete a minor in Education. The Education minor, which has been developed to coordinate with the major, requires completion of 40 credit hours. Please refer to *Teacher Education Program* section/*Specific Requirements for the Elementary Teaching Endorsement*. Education has special requirements for admission and retention. Please refer to *Teacher Education Program* section/*Selective Entry and Retention in Teacher Education Admission.*

Program Assessment

Assessment will be ongoing, with evaluations at three check points (admission to education, admission to student teaching, and program completion), as well as follow-up assessments at the end of one year after program completion. Student outcomes will be evaluated through, a) formal assessments at the sophomore (*e.g.,* Proficiency Profile) and senior level (PRAXIS or PLACE Elementary Education Content Exam), b) faculty recommendations of student progress, c) portfolio assessment, and d) assessment of the application of knowledge in students' field experiences and student teaching. The contents of the electronic portfolio required of all students will include representative work from courses, as well as student-directed evaluations of progress.

Requirements for the Liberal Studies Major

Requirements for admission and retention in teacher education are included in the description of the *Teacher Education Program* in this catalog and in the Teacher Education Handbook.

Students must receive a grade of C or greater in all courses listed as requirements; a minimum cumulative GPA of 2.500 in courses completed in the major at CSU-Pueblo is required for admission to student teaching.

GENERAL EDUCATION REQUIREMENTS

General Education Skill Requirements

Courses		Titles	Credits
ENG	101	Composition I	3
ENG	102	Composition II	3
MATH	156	Introduction to Statistics	3

General Education Knowledge Requirements

Courses		Titles	Credits
BIOL	100	Principles of Biology	3
BIOL	100L	Principles of Biology Lab	1
ENG	130	Introduction to Literature	3

GEOG	103	World Regional Geography	3
GEOL	101	Earth Science	3
GEOL	101L	Earth Science Lab	1
PSYCH	151	Human Development	3
SPCOM	103	Speaking and Listening	3

One of the following: 3
ART	100	Visual Dynamics	3
MUS	118	Music Appreciation	3

One of the following: 3
HIST	101	World Civilization to 1100	3
HIST	102	World Civilization from 1100 to 1800	3
HIST	103	World Civilization since 1800	3

Students are not allowed to count the same courses completed for general education requirements as course requirements in the Liberal Studies major, including those in concentrations.

Total General Education Required 35

LIBERAL STUDIES CORE REQUIREMENTS

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	111	Theatre Appreciation	3

MATH (9 hours)
MATH	360	Elem. Concepts of Mathematics I	3
MATH	361	Elem. Concepts of Mathematics II	3
MATH	362	Problem Solving for Elementary Teachers	3

MULTICULTURAL STUDIES (3 hours)
CS	420	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 <u>one</u> 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 other departments; 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
AT   232   First Aid 2
EXHP   382   Lifestyle Disease Risk Reduction..........3

HISTORY
HIST   201/or
          202   U.S. History I/II (whichever class
                    not completed in core) 3
HIST   300   Historiography 3
History courses numbered 300 or above..........................6

LANGUAGE AND LINGUISTICS
ANTHR   106   Language Thought & Culture................3
ENG   352   English Syntax and Usage...................3
FL   100   Intro to Comparative Linguistics 3
SPCOM   260   Language Acquisition and Linguistics...3

LEADERSHIP
US   160   Introduction to Leadership 3
US   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.

<u>FRENCH</u>
FRN   courses 12

<u>ITALIAN</u>
ITL   courses 12

<u>SPANISH</u>
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
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	181/L	College Biology I/Organismal Bio/Lab	4
BIOL	206/L	Intro to Microbiology /Lab	4
CHEM	101/L	Chemistry and Society/Lab	4
CHEM	111/L	Principles of Chemistry/Lab	4
CHEM	121/L	General Chemistry I/Lab	5
PHYS	110/L	Astronomy/Lab	4
PHYS	140/L	Light, Energy, and the Atom/Lab	4
PHYS	201/L	Principles of Physics I/Lab	4
PHYS	221/L	General Physics I/Lab	5

SOCIOLOGY

SOC	101	Introduction to Sociology	3
9 hours from the following; 6 must be upper division			9
SOC	105	Understanding Human Diversity	3
SOC	155	Minority and Ethnic Relations	3
SOC	201	Social Problems	3
SOC	206	Gender and Society	3
SOC	231	Marriage & Family Relationships	3
SOC	306	Delinquency & Juvenile Justice	3
SOC	308	Popular Culture	3
SOC	354	Urban Sociology	3
SOC	355	Political Sociology	3
SOC	356	Social Stratification	3
SOC	403	Human Sexuality and Social Behavior	3
SOC	404	Poverty	3
SOC	407	Family Violence	3

Required Concentration in Discipline Area ... 12
(See concentrations listed above)

Elementary Education Requirements ... 40

PROGRAM REQUIREMENT TOTAL ... 120

READING PROGRAM

READING MINOR

The reading minor is intended for elementary, secondary, or K-12 teacher certification candidates who wish to have a recognized area of strength in the teaching of reading and other language arts.

Expected Student Outcomes

As a result of successfully completing the reading minor, the student must be able to:

- Recognize, describe, diagnose, and teach all the generally accepted concepts, strategies and skills in the areas of oral language, reading readiness, emergent literacy, word recognition, comprehension, interpretation, literary appreciation, reading for information, critical reading and thinking, reference skills, study skills, oral reading, listening, speaking, English language usage, syntax, grammar, punctuation, capitalization, creative and informative writing, spelling and penmanship;

- Describe the role and importance of the child's self-concept, 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, student-generated 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 21 hours, 14 from core courses and 7 hours chosen from available electives with consultation with an education advisor. Many electives are available only in summer sessions.

Core Course Requirements

Courses		Titles	Credits
ENG	351/412	Children's Literature/Literature for Adolescents	2
RDG	410	Teaching Reading	3
RDG	411	Teaching Elementary Language Arts	2
RDG	435	Content Area Literacy	4
RDG	450	Diagnosis and Remediation of Reading Problems	3

CORE TOTAL 14

Seven credits of electives from the following list: 7

Courses		Titles	Credits
BBE	420	Literacy for EL Learners	3
ED	429	Literacy & Technology	3
RDG	310	Current Approaches to Reading and Writing Instruction	3
RDG	360	Practicum	1-3
RDG	431	Developing Creative Centers	1
RDG	436	New Directions in Reading Comprehension	2
RDG	437	Newspapers as a Teaching Resource	1
RDG	442	Reading Across Cultures	2
RDG	491	Special Topics in Reading	1-2

Core Total	14
Electives Required	7
Total Required	21

Higher Education Act (HEA) Reporting Requirements

In October 1998, Congress enacted Title II of the Higher Education Act (HEA), requiring new reporting requirements for institutions and states on teacher preparation and licensing. Section 207 of Title II requires the annual preparation and submission of a report by each university that prepares teachers on how well individuals who complete its teacher preparation program perform on initial state licensing and certification assessments in their areas of specialization. Universities are also required to publish information on basic aspects of their programs, such as number of students, amount of required supervised practice teaching, and the student-faculty ratio in supervised practice teaching. Information on students who completed CSU-Pueblo's teacher education program during 2009-2010 can be found on the program's website: http://ceeps.colostate-pueblo.edu/TEP/Pages/default.aspx

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

Dr. Roy Sonnema, Dean

Academic Departments/Programs

Art

Major: Art (BA, BFA)
        Emphasis Area:
          Art Education K-12 (BA)

Minor: Art

Chicano/a Studies Program

Minor: Chicano Studies

English/Foreign Languages

Majors: English (BA)
        Emphasis Areas:
          Creative Writing
          Secondary Teaching Endorsement
        Foreign Language-Spanish (BA)

Minors: Creative Writing
        English
        French
        Italian
        Professional Writing
        Spanish

History/Political Science/Philosophy/Geography

Majors: History (BA, BS)
        Emphasis Area:
          History Secondary Education (BS)
        History (M.A.)
       (See *Graduate Programs* section of catalog)
          Emphasis Areas:
          General History
          Public History
          Teaching
        Political Science (BA, BS)
          Emphasis Areas:
          American Political Institutions and
           Politics
          Global Studies
          Public Administration and Public Policy
          Secondary Education

Minors: History
        Philosophy
        Political Science

Certificate: Homeland Security Studies

Mass Communication and Center for New Media

Major: Mass Communications (BA, BS)
        Emphasis Areas:
          Electronic Media
          Integrated Communication
          Journalism

Minor: Mass Communications

Military Science ROTC Program

Minor: Military Science

Music

Major: Music (BA)
        Emphasis Areas:
          Music Education K-12
          Music Performance

Minor: Music

Non-Profit Administration

Minor: Non-Profit Administration

Psychology

Major: Psychology (BA, BS)

Minor: Psychology

Social Work

Major: Social Work (BSW)

Sociology/Anthropology/Social Science

Majors: Sociology (BA, BS)
        Emphasis Area:
          Criminology
        Social Science (BA, BS)
        (Offered through Continuing Education only)

Minors: Anthropology
        Sociology
        Social Science (offered through Continuing
                 Education only)

Women's Studies

Minor: Women's Studies

Mission

The mission of the College of Humanities and Social Sciences is to help students develop critical thinking skills, aesthetic awareness, and ethical perspectives, to provide them with the tools and expertise necessary to function as responsible citizens and professionals and to engage in intellectual and artistic pursuits. Faculty members are committed to high quality teaching, theoretical and applied research, scholarship, creativity, to effective service to the University, the profession, and the region, and to the innovative use of technology in these endeavors. The college strives to be a community of learners, teachers, and scholars responsive to the challenges of a diverse society, a vulnerable environment, and an increasingly technological and interdependent world.

Graduation Requirements

In addition to 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. Students are encouraged to pursue a minor to complete this requirement.

ART DEPARTMENT

Department Chair: William Folkestad

Faculty: Aviña, Dalton, Folkestad, R. Hansen, V. Hansen, Johnson, Peters

The art curriculum is designed to aid and promote exploration of art-making processes and to increase the student's understanding of art and its relationship to society. The art major prepares the student to be a practicing artist, to enter graduate school for further professional education or to enter the job market in art-related careers. Students also may select art courses as a means of achieving a greater sense of personal creativity and accomplishment. Students, faculty, and invited professional artists display works in the CSU-Pueblo Art Gallery. An active visiting artist program provides contact with successful regional and national professionals.

The major in art leads to the degrees of Bachelor of Arts (BA) or Bachelor of Fine Arts (BFA). A minor in art is also available.

The department aims to provide art facilities, a creatively active faculty, and an engaging curriculum in a variety of emphasis areas. While at CSU-Pueblo, students mature as artists and integrate their knowledge in broad ways to fulfill their creative and professional lives.

General Program Requirements

- The art faculty firmly believes that a quality undergraduate art program must be built from the strong foundation of basic concepts and techniques provided by the required ART CORE courses. Art history, drawing and design combined with an introduction to the basic art processes, provide the necessary background of information and skills for individual artistic growth and maturity. A strong grounding in the fundamentals of art, as provided in the ART CORE, indicates the department's insistence upon respect for and commitment to the academic discipline of art as a professional career.

- Art majors must complete the required courses known as the ART CORE, before proceeding into the beginning courses.

- No grade lower than a C will count toward either an art major or minor.

- BFA candidates must maintain a 3.0 in the art major.

- Students are required to take 30 hours of major courses in residency.

Core Requirements for the Art Major

Art Core Courses

ART Courses	Titles	Credits
ART 110	Art Career Orientation (Fall Semester)	1
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 234	Painting I OR	
ART 270	Printmaking I	3
ART 247	Ceramics I OR	
ART 233	Sculpture I	3
ART 281	Intro to Graphic Design I OR	
ART 274	Digital Art I	3
ART 310	Portfolio Review	1

ART	411	Twentieth-Century Art...........................3
ART	410	Senior Career Orientation.....................1
		(last spring semester)

TOTAL 33

PLUS
Emphasis area 12
ART Upper Division Electives
(selected with an art advisor)...............5

TOTAL 50

Specific Requirements for BA Degree Art Education K-12 Emphasis

ART Courses		Titles	Credits
Required Art Core 19			
ART	234	Painting I...3
ART	247	Ceramics I 3
ART	270	Printmaking I 3
ART	276	Photography 3
ART	281	Intro to Graphic Design I.......................3
ART	XXX	Upper Division Art History Course 3
ART	310	Portfolio Review.....................................1
ART	410	Senior Career Orientation.....................1
		(last spring semester before student teaching)
ART Upper Division Electives		
		(selected with an art advisor)..............12

TOTAL 51

There are additional licensure requirements; consult the Teacher Education Program for details.

Specific Requirements for the BFA Degree Art Major

ART Courses	Titles	Credits
Required Art Core 19		

Studio Explorations 9
(Select 3 courses for a total of 9 semester hours from the following list:)

ART	233	Sculpture I 3
ART	234	Painting I...3
ART	247	Ceramics I 3
ART	270	Printmaking I...3
ART	274	Digital Art I 3
ART	276	Photography 3
ART	281	Intro to Graphic Design I.......................3
ART	291	Special Topics 3

Professional Development

ART	310	Portfolio Review.....................................1
ART	410	Senior Career Orientation.....................1
		(last spring semester)

Art History

ART	411	Twentieth-Century Art...........................3
ART	XXX	Upper Division Art History 3

PLUS
ART Upper Division Electives 15
ART Upper Division Studio Emphasis Area 15

TOTAL 66

Specific Requirements for the Art Minor

ART 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 21

Co-curricular requirements

The faculty supports and encourages the involvement of art majors and minors in the Art Club and related activities specific to each studio.

Department of Art Student Learning Outcomes and Assessment Activities

1) Students will apply discipline-specific competencies for success in their emphasis area.

- Outcome Assessment Activity: ART 410 with exit survey

2) Students will distinguish the role of art in a global society.

- Outcome Assessment Activity: Senior portfolio with exit survey and art history rubric to measure quality of written expression

3) Students will employ creative skills associated with interdisciplinary learning.

- Outcome Assessment Activity: ART 410 with exit survey

4) Students will make use of intellectual and practical skills for lifelong learning.

- Outcome Assessment Activity: Internships with employee surveys

5) Students will create original work suitable for entry into a juried exhibition.

- Outcome Assessment Activity: Annual juried art show and any non-juried student on-campus shows

6) Art education students will be able to apply the knowledge and skills needed to help children learn to create and appreciate art.

- Outcome Assessment Activity: <u>PLACE test in addition to other BA measurements</u>

CHICANO/A STUDIES PROGRAM

The Chicano/a studies minor complements majors and careers in law, sociology, social work, languages, education, government, business and other disciplines. Courses offer unique undergraduate preparation for those who seek entrance to graduate studies in law, humanities or the social sciences.

Students who plan to live and work in the American Southwest or aspire to careers that involve relations in the American continents are likely to be well served by Chicano/a Studies courses. The interdisciplinary approach emphasizes history and cultural studies, and selected courses provide the student with in-depth knowledge of specific aspects of the Chicano/a community.

Program Goals

- To provide individual courses as well as a minor to fulfill the unique role and mission of Colorado State University-Pueblo.

- To offer an individually designed minor in support of students' majors.

Student Learning Outcomes

- Students 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.

- Identify how Chicanos have impacted the culture, politics, and history of the United States.

- Describe the importance of including Chicano studies courses within a University curriculum.

General Requirements

- Students must earn a C or better in all courses applicable to the minor.

Specific Requirements for the Chicano/a Studies Minor

Twenty-four hours: 15 required 9 elective. The following five courses are required:

CS Courses		Titles	Credits
CS	101	Introduction to Chicano Studies	3
CS	136	The Southwest United States	3
CS	246	History of Mexico	3
CS	306	La Chicana	3
CS	493	Seminar	3
Electives			9
			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	Credits
CS/ENG	220	Survey of Chicano Literature	3
CS/SW	230	Chicano: Social and Psych Study	3
CS	291	Special Topics	1-3
CS	303	Chicano Labor History in the U.S.	3
CS/SW	325	Health in the Chicano Community	3
CS/WS	341	Chicana Writers	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
CS	498	Internship	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, Montgomery-Ratcliff, Morales, Picicci, Ribadeneira, Rodríguez-Arenas, 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.

Student Learning Outcomes

Upon completion of the B.A. in English program, students will:

- Demonstrate knowledge of significant traditions, historical and cultural contexts, and current issues in literature and language studies.

- Conduct, analyze, evaluate, and integrate academic research.

- Understand and apply strategies of critical theory.

- Analyze literature and synthesize ideas with clarity, accuracy, and coherence with an understanding of standards and conventions of language in a given rhetorical situation.

- Understand and write using a variety of literary genres.

- Construct an original and convincing argument using a range of rhetorical strategies in speech and writing.

- Develop general communication and learning skills and understand the value of ongoing critical reading, thinking, and writing.

Students completing the B.A. in English program and a creative writing emphasis will also:

- Demonstrate a working vocabulary for critical analysis through theoretical venues as well as in-depth study of terminology and form within creative works to develop strong critiquing skills in the workshop environment.

- Produce writing competitive at a publishable level, which reflects an understanding of the creative writing genres, the business of writing, and the drafting and revision process for individual and collections of works.

Requirements for the English Major

- Specific requirements for the English major are listed below. Students should consult with an advisor in English before registration.

- Students must complete, with a grade of C or better, all courses counting toward the major or minors.

- Students must fulfill the University language requirements for the BA degree, first year foreign language (6-8 credit hours) OR English 106 (3 credit hours) and Foreign Language 100 (3 credit hours) OR SPCOM 116 and 216. For International students, English 101 and 102 fulfill the Foreign Language Requirement.

Requirements for the English Minor

- Minor requirements are 20 or more semester credit hours of course work in English numbered 106 or above, of which 12 must be upper division. Courses must be chosen in consultation with an advisor in English.

- Students must complete, with a grade of C or better, all courses counting toward the major or minors.

- For teaching endorsement requirements, see the Teacher Education Program section.

Co-curricular Requirements

The English faculty supports and encourages English majors' involvement in student organizations and participation in tutoring activities in the community and on campus.

Outcomes Assessment Activities

Assessment of the English program is the responsibility of all English Program faculty. The English Program's annual reports evaluating the program and proposing any needed changes are compiled from the following information:

- A central file of course syllabi with representative assignments is maintained by the department for inspection by the committee and other qualified persons.

- Faculty advisors monitor each student's progress toward completing major requirements listed in the catalog.

- All English majors take a senior-year seminar (English 493) emphasizing professional standards and synthesizing the writing and analytical skills students have acquired in other English classes. All students in English 493 write a senior research paper, one copy of which is submitted to the department chairperson for dissemination for review. In order to pass English 493, students must demonstrate satisfactory levels of achievement in meeting the program goals.

- English Program faculty review the papers from English 493 on an annual basis and prepare an analysis of what they reveal about the program's success.

- The English Program administers a 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 English Program faculty consider the English curricula at leading comparable institutions and apprise the department of innovations worthy of consideration.

ENGLISH MAJOR

- Faculty advisors meet individually with each of their students on a regular basis to help plan schedules and discuss educational and career goals. Advisors maintain an accurate and up-to-date record of each student's progress towards completion of the requirements for the major.

- All English majors will participate in a senior-year seminar in which all of the writing and analytical skills acquired in other English classes will be synthesized. Students in the class will be expected to complete a senior research project.

Specific Requirements for the Bachelor of Arts in English

A total of 45 credits in English beyond 101 and 102 (FL 100 and ENG 106 may be counted, but not double counted for Foreign Language), distributed as follows:

ENG Courses		Titles	Credits
ENG	201	Introduction to Literary Study	3
		(To be taken at or near the start of 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
ENG	310	Advanced Literary Forms & Genres

At least **three** courses in Literature in Historical Perspective, chosen with the approval of the major advisor, two of which must comprise a sequence of American or British literature at the 200 level (i.e., ENG 210 and ENG 212 or ENG 231 and ENG 232), while the third must be at the 300 level or above. 9

At least **two** courses in Major Writers, at least one of which must be in Shakespeare 6

At least **one** course in Literary Theory 3

At least **one** course in Writing, beyond ENG 101 and 102 3

At least **one** course in The English Language and Linguistics (FL 100 and ENG 106 may be counted, but not double counted for Foreign Language). 3

At least 14 credits of English electives, chosen with the approval of the major advisor (General Education and Foreign Language requirements may not be double counted). 14

TOTAL   47

Specific Requirements for the Bachelor of Arts in English with Creative Writing Emphasis

A total of 45 credits in English beyond 101 and 102 (FL 100 and ENG 106 may be counted, but not double counted for Foreign Language), distributed as follows:

ENG Courses		Titles	Credits
ENG	201	Introduction to Literary Study	3
ENG	114	Introduction to Creative Writing	3
		(To be taken at or near the start of the program)	

ENG 414 Advanced Writing Workshop 3
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
ENG 310 Advanced Literary Forms & Genres

At least **three** courses in Literature in Historical Perspective, chosen with the approval of the major advisor, two of which must comprise a sequence of American or British literature at the 200 level (i.e., ENG 210 and ENG 212 or ENG 231 and ENG 232), while the third must be at the 300 level or above 9

At least **two** courses in Major Writers, at least one of which must be in Shakespeare 6

At least **one** course in Literary Theory 3

At least **one** course in The English Language and Linguistics (FL 100 and ENG 106 may be counted, but not double counted for Foreign Language) 3

At least **two** credits of English electives, chosen with the approval of the major advisor (General Education and Foreign Language requirements may not be double counted). 2

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

_____
TOTAL   47

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

A total of 45 credits in English beyond 101 and 102 (FL 100 and ENG 106 may be counted, but not double counted for Foreign Language), distributed as follows:

ENG Courses		Titles	Credits
ENG	201	Introduction to Literary Study 3	
		(To be taken at or near the start of 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
ENG 310 Advanced Literary Forms & Genres

At least **four** courses in Literature in Historical Perspective, chosen with the approval of the major advisor, two of which must be the American literature sequence at the 200 level (i.e., ENG 210 and ENG 212), one of which must be one 200 level course in the British literature sequence (either ENG 231 or ENG 232), while the fourth must be outside of American Literature at the 300 level or above 12

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 352 English Syntax and Usage 3
ENG 412 Literature for Adolescents.....................2
ENG 452 History of the English Language 3

At least **4 credits** of English electives, chosen with the approval of the major advisor (General Education and Foreign Language requirements may not be double counted) 4

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TOTAL   45

CREATIVE WRITING MINOR

The Creative Writing Minor is designed for students interested in pursuing an MFA in creative writing or students who wish to continue their creative activity after graduation. Since MFA degrees specialize in poetry, playwriting, creative nonfiction, or fiction, students will complete 21 credits of coursework concentrating on one genre while also establishing knowledge of the creative writing workshop, the drafting/revision process, and the business of writing.

Student Learning Outcomes

- Students will demonstrate a working vocabulary for critical analysis through theoretical venues as well as in-depth study of terminology and form within creative works to develop strong critiquing skills in the workshop environment.

- Students will produce writing competitive at a publishable level, which reflects an understanding of the creative writing genres, the business of writing,

and the drafting and revision process for individual and collections of works.

Outcome Assessment Activities

The Coordinator of the Creative Writing minor reviews student portfolios to evaluate student performance levels in conjunction with Program Goals, tracks student placement in graduate programs, and records student and former student publications, reporting the result annually.

Specific Requirements for the Creative Writing Minor

Required Core Courses 9

ENG	114	Introduction to Creative Writing (to be taken at the start of the minor)
ENG	201	Introduction to Literary Study OR
ENG	310	Advanced Literary Forms & Genres
ENG	414	Advanced Writing Workshop (to be taken at the end of the minor)

One of the selected pairs 6

ENG	307	Poetry
ENG	315	Creative Writing: Poetry
ENG	308	Fiction
ENG	316	Creative Writing: Fiction
ENG	308	Fiction
ENG	317	Creative Nonfiction
ENG	309	Drama
ENG	318	Creative Writing: Drama

Electives (if not used above) 6

CS/ENG	220	Survey of Chicano Literature
ENG	240	Survey of Ethnic Literature
ENG	310	Advanced Literary Forms & Genres
ENG	315	Creative Writing: Poetry
ENG	316	Creative Writing: Fiction
ENG	317	Creative Nonfiction
ENG	318	Creative Writing: Drama
ENG	319	Professional Editing
ENG	325	Nature Writing in the West
ENG	326	Writing for the WEB
ENG/WS	340	Women in Literature
ENG	345	Multiculturalisms in America
ENG	352	English Syntax and Usage
ENG	385	Literacy Criticism and Theory
ENG	452	Novels into Film 1740-Present
ENG	491	Special Topics (with advisor's approval)
CS/WS	341	Chicana Writers
MCCNM	233	Script Writing
MCCNM	304	Feature Writing

TOTAL   21

PROFESSIONAL WRITING MINOR

The English program coordinates a minor in professional writing (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*.

Student Learning Outcomes

- Professional Writing minors will create and implement appropriate formats and designs for specific audiences and purposes and will be able to recognize and adjust for timeline constraints as needed.

- Professional Writing minors will employ critical thinking skills in order to seek out and use a variety of resources to investigate a problem, acquire and assess information, and organize it effectively.

- Professional Writing minors will design documents professionally, using appropriate technological resources, software and hardware, as well as appropriate elements of design.

- Professional Writing minors will evaluate others' writing, accept and implement the recommendations of others in revision and editing. They will edit appropriately, using conventional grammar, spelling, and diction, and they will apply the appropriate guide.

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 9

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 Writing
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 9

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

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 the many careers where educated bilingual speakers are highly valued.

Minors in French, Italian, and Spanish complement a wide variety of majors in other disciplines to enhance the students' ability to compete for jobs where knowledge of a foreign language is desirable.

Courses in German, Russian, and Comparative Linguistics (listed under FL) are offered as permitted by enrollment. Student exchanges with foreign universities and other study-abroad programs are encouraged.

Student Learning Outcomes for Spanish Majors

Spanish Majors will achieve a level of proficiency in Spanish communication skills (listening, speaking, reading, and writing) and in the understanding of Hispanic cultures sufficient to allow them to function effectively in careers in teaching, business, the media, government, the arts, etc.

These outcomes will be achieved by showing proficiency in the 5 C's:

1) **Communication:** The communication standard stresses the use of Spanish for communication in "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 Spanish-language instruction through lessons or courses that are developed around themes common to other subject areas.

4) **Comparisons:** Students are encouraged to compare and contrast Spanish language and cultures with their own. They discover patterns, make predictions, and analyze similarities and differences across languages and cultures. Students often come to understand their native language and culture better through such comparisons.

5) **Communities:** Extending learning experiences from the Spanish-language classroom to the home and multilingual and multicultural community emphasizes living in a global society. Activities may include: field trips; use of e-mail and the Internet; participation in clubs, exchange or study-abroad programs, and cultural activities; school-to-work opportunities; and opportunities to hear speakers of Spanish at the University and in the classroom.

Student Learning Outcomes for Minors in Spanish, French and Italian

Students minoring in French, Italian, and Spanish will be required to demonstrate a level of proficiency sufficient to converse comfortably on everyday topics, to attain intermediate levels of proficiency in writing and reading the target language, and to understand and appreciate the target language cultures.

NOTE: Majors or minors who fail to complete a course with a grade of C or better are required to repeat the course with a satisfactory grade before proceeding to more advanced offerings.

Placement in the Spanish course sequence:

1. Students who have taken no Spanish in high school or at another institution of higher learning begin with SPN 101.

2. Students, who have taken Spanish in high school, but not at another institution of higher learning, must take a placement exam to determine their proper placement.

3. Heritage Spanish speakers (that is, students who speak Spanish at home to a greater or lesser extent), students with significant Spanish immersion experience, and students who have taken Spanish courses at other institutions of higher learning must meet with a Spanish advisor in order to determine correct placement. The advisor will place the student based on any of the following or a combination thereof: an oral interview, a placement exam, a written composition.

Specific Requirements for the Spanish Major

In addition to the courses listed below, Spanish majors must also meet the following requirements:

1. A senior assessment project.

2. A minor or a second major.

3. Completion of the oral and written proficiency exams and of the graduating-senior survey.

4. At least one upper-division SPN course must emphasize Latin America, one Spain.

Study abroad is strongly encouraged, especially for students planning to teach.

SPN Courses	Titles	Credits
SPN	101	Beginning Spanish I 3
SPN	102	Beginning Spanish II 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 6
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 9
_____
TOTAL   39

General Education 35
Spanish Major 39
Minor, Second Major, or Teacher Ed 20-37
Electives..9-26

Total 120

Specific Requirements for the Spanish Minor

SPN Courses	Titles	Credits
SPN	101	Beginning Spanish I 3
SPN	102	Beginning Spanish II 3
SPN	201	Intermediate Spanish I 3
SPN	202	Intermediate Spanish II 3
SPN	203	Intermediate Proficiency Building 3
SPN	300	Spanish Phonetics and Phonology...........3
SPN	301	Advanced Spanish Grammar 3
One other 300- or 400-level SPN course 3		

_____
TOTAL   24

Specific Requirements for the French Minor

FRN Courses	Titles	Credits
FRN	101	Beginning French I 3
FRN	102	Beginning French II 3
FRN	201	Intermediate French I 3
FRN	202	Intermediate French II 3
French Electives above 300* 9		

* (in house or through study abroad program)

_____
TOTAL   21

Specific Requirements for the Italian Minor

ITL Courses		Titles	Credits
ITL	101	Beginning Italian I	3
ITL	102	Beginning Italian II	3
ITL	201	Intermediate Italian I	3
ITL	202	Intermediate Italian II	3
Italian Electives above 300*			9

* (in house or through study abroad program)

TOTAL   21

Outcomes Assessment Activities

Assessment of the foreign languages program is the responsibility of the Foreign Languages Program Assessment Committee, consisting of the associate chair for Foreign Languages and three other faculty members. The committee's annual reports evaluating the program and proposing any needed changes are compiled from the following information:

- A central file of course syllabi with representative assignments is maintained by the department for inspection by the committee and other qualified persons.

- Faculty advisors monitor each student's progress towards completing major requirements and meeting the program goals listed in the catalog. Advisors report any problems or deficiencies in the program encountered by the students to the program assessment committee through the associate chair.

- All Spanish majors produce a senior assessment 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. Harris

Faculty: Berardi, Harris, Malet, Loats, Matusiak, Montoya, O'Connor, Rees, Sandoval, Spade, Stroud

The programs in history, political science, philosophy, and geography are intended to provide domains of study both for students who desire knowledge for personal enrichment and for students who desire to apply knowledge toward career objectives. Students who major or minor in the fields of the department should expect to develop and refine knowledge of other cultures and the historical and political development of the modern world. Students should also expect to engage in methodical research. Other expectations of students include the ability to prepare rationally cogent papers and the ability to understand political theories, historical movements, and the connections between each.

Departmental programs not only prepare students for occupations in government, business, education, and industry, but also are central to the University's traditional function of transmitting culture from generation to generation.

HISTORY PROGRAM

The major in history leads to the degree of Bachelor of Arts (BA) or Bachelor of Science (BS) and prepares students for careers in teaching, law, government, and private enterprise, as well as entry into graduate programs.

Program Goals

- To provide students with a general knowledge of history and historical methodology;

- To prepare students, through training in communication skills and in research methods, to gain knowledge of a given area of history;

- To prepare students to continue personal study and learning about specific subject areas in the discipline on an independent basis;

- To prepare students to engage in critical thinking; and

- To introduce students to the theoretical frameworks that serve as the foundation of historical scholarship.

Expected Student Outcomes for the History Program

On completion of the Bachelor's degree, history majors at CSU-Pueblo will:

- Demonstrate literacy–analytical reading and effective writing skills–in general, and for historical content;

- Demonstrate understanding of the history of historical writing, and demonstrate the ability to apply the principles and theories that support historical writing;

- Demonstrate knowledge of specific times and locations studied, and knowledge of the complexities of the past and the diversity of human cultures in those times and places;

- Apply the concepts of historical thinking, for example, in evaluating change over time; and

- Demonstrate skills in historical research, including historical analysis and interpretation.

General Requirements

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

- Students are expected to complete HIST 300 before or in their third year of classes, and HIST 493 in their final year. Class size in HIST 300 and HIST 493 is limited. A grade of D+ or lower in HIST 300 or 493 will, after the third attempt in either course, result in being prevented from enrolling in the course again. The student may be eligible for reconsideration on a one-time basis, with approval by the student's advisor. If repeated registration, after the third attempt is permitted, subsequent failure to achieve a grade of C will make the student ineligible for readmission to those courses.

- Students must take HIST 300 and HIST 493 in residence. No courses will be accepted in transfer to substitute for either of these courses.

Core Requirements for the History Major

HIST Courses		Titles	Credits
HIST	101	World Civilization to 1100	3
HIST	102	World Civilization 1100 to 1800	3
HIST	103	World Civilization since 1800	3
HIST	201	United States History I	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 of which at least 6 hours must be from non US history courses. A minimum of two semesters of college level foreign language is required for the BA degree in History; more is recommended. The BA degree in History is appropriate for students planning to attend graduate or law school.

Requirements for the Bachelor of Science Degree in History: General Emphasis

Students must complete the "Core Requirement for the History Major" outlined above, plus 21 hours of history electives of which at least 6 hours must be from non US history courses (at least fifteen hours to be upper level). This emphasis is designed for those students who intend to enter business or government directly after graduation.

Requirements for the Bachelor of Science Degree in History: Secondary Education Emphasis

The Secondary Education emphasis for the History Major leads to the degree of Bachelor of Science (BS) and prepares students for teaching at the middle and high school level. Students must complete the "Core Requirements for the History Major" listed above, 15 hours of history electives of which at least 6 hours must be from non US history courses, the "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	3
POLSC	101	American National Politics	3
POLSC	102	State and Local Governments	3

TOTAL 15

Specific Requirements for the History Minor

HIST Courses		Titles	Credits
Nine hours selected from the following courses:			9
HIST	101	World Civilization	3
HIST	102	World Civilization to 1100	3
HIST	103	World Civilization since 1800	3

HIST	201	United States History I.....................3
HIST	202	United States History II....................3
HIST	211	Colorado History.............................3
PLUS		
HIST	300	Historiography 3
History Electives approved by the minor advisor..............9

TOTAL 21

Outcomes Assessment Activities for the History Program

Portfolio reviews serve as the core, formal assessment tool for the History Program. Student portfolios contain papers written for two core courses required by the program—historiography and seminar. Portfolio papers are reviewed on the basis of the student learning outcomes.

PRE-LAW

Although a political science or history major, or minor, is not required to attend law school, students completing either major will acquire the needed critical thinking and writing skills to enhance their chances of getting accepted to law school and once accepted, excelling at law courses.

POLITICAL SCIENCE PROGRAM

The major in political science leads to the degrees of Bachelor of Arts (BA) and Bachelor of Science (BS), and prepares undergraduates for careers in law, government and politics. Courses in political science also serve to complement the liberal arts core at CSU-Pueblo and to prepare students for acceptance into graduate programs leading to professional degrees in law, public administration, or to specialized academic degrees.

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 for the Political Science Program

Knowledge Outcome: Students should have factual knowledge about the various subfields in political science. This includes knowledge about the major theories, issues and methods of inquiry for each subfield.

Writing Outcome: Students should be able to write complex prose, with correct grammar. They should be able to present a coherent and persuasive argument on a political science topic in a research format following the APSA format.

Critical Thinking Outcome: Students should be able to:

- Define problems, examine evidence, and analyze the assumptions leading to a conclusion;

- Question arguments, casual theories, evidence broad generalizations, and simple correlation;

- Are open to both sides of an argument; and

- Are prepared to examine and expose holes in all arguments (including their own).

Communication Outcome: Students should be able to clearly and concisely present their ideas as participants in classroom discussions and in presenting their research.

General Requirements

- Students in the major must complete a minimum of 36 semester credit hours in political science, including 18 hours in the political science core. Students are required to earn a grade of C or better in all political science courses.

- Students in the minor must complete a minimum of 21 semester credit hours in political science, including 9 semester credit hours in the political science core. Students are required to earn a grade of C or better in all political science courses.

- A maximum of six credit hours of POLSC 480, Practicum in Politics and Public Service, may be applied towards the 36 hours required for the major, or three credit hours towards the 21 hours required for the minor.

- Depending on individual interests and goals, students are encouraged to take one year of foreign language, courses in statistics, and PHIL 204, Critical Thinking.

Required Core Requirements for the Political Science Major

POLSC Courses		Titles	Credits
POLSC	101	American National Politics	3
POLSC	201	International Relations	3
POLSC	202	Comparative Politics	3
POLSC	240	Political Analysis	3
POLSC	370	Western Political Thought	3
POLSC	493	Seminar	3
		TOTAL	**18**

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	18
POLSC	102	State and Local Government and Politics	3
POLSC	250	Research Methods in Political Science	3
POLSC	330	Introduction to Public Administration	3
POLSC	340	Public Policy	3
POLSC	480	Practicum in Politics and Public Service	6
		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	18

Two of the following: 6
POLSC	440	Nationalism/Ethnic Conflict	
POLSC	445	Inequality and Economic Development	
POLSC	450	Democracy and Dictatorship	
POLSC	455	States, Citizens and Human Rights	

PLUS
POLSC	480	Practicum in Politics and Public Service	3

Select **three** courses from the following: 9
POLSC	200	Understanding Human Conflict	
POLSC	250	Research Methods in Political Science	
POLSC	305	War, Peace, and Globalization	
POLSC	440, 445, 450, 455	(not taken above)	
		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 Courses		Titles	Credits
POLSC		Required Core Courses	18
POLSC	102	State and Local Government and Politics	3
POLSC	480	Practicum in Politics and Public Service	3

Political Science Electives from the following: 12
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, 12 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	3
HIST	101	World Civilization to 1100	3
HIST	102	World Civilization from 1100-1800 OR	
HIST	103	World Civilization Since 1800	3
HIST	201	U.S. History I	3
HIST	202	U.S. History II	3

TOTAL 21

Specific Requirements for the Political Science Minor

POLSC Courses		Titles	Credits
POLSC	101	American National Politics	3
POLSC	201	International Relations OR	3
POLSC	202	Comparative Politics	
POLSC	240	Political Analysis	3
Political Science Electives			12

TOTAL 21

CERTIFICATE IN HOMELAND SECURITY STUDIES

The Political Science Program administers the Center for the Study of Homeland Security, which now offers a certificate program for degree-seeking students as well as military, law enforcement, and emergency response personnel. The program core courses match curriculum guidelines established by the Department of Homeland Security, and a variety of elective courses in different

related fields provide additional substantive knowledge. Recipients of the certificate will gain a deeper understanding of current security issues and the governmental decision-making process and the certificate will be valuable in hiring and promotion decisions in numerous career fields.

Non-degree-seeking students should apply as Political Science majors upon entering the program. The University does not transcript certificates, so records of the Homeland Security Studies Program and the issuance of the certificate are administered by the Political Science Program.

Currently some of the courses for the Homeland Security Studies Program are under development; therefore, those courses will currently be offered under POLSC 291, Special Topics, until they are approved.

POLSC Courses		Titles	Credits
POLSC	270	Introduction to Homeland Security	3
POLSC	271	Terrorism	3
POLSC	272	Critical Incident Management	3
Homeland Security Studies Elective Course			3

Possible Electives

Courses		Titles	Credits
CHEM	260	Forensic Chemistry I	3
CIS	461	IT Security Management	3
CIS	462	Computer Forensics	3
HIST	311	History of United States Foreign Policy	3
POLSC	201	International Relations	3
SOC/ANTHR	451	Culture/Deviance/Psychopathology	3

Additional Special Topics courses that fulfill the elective requirement will be offered by the program.

For information regarding the Certificate in Homeland Security Studies, please call (719) 549-2156.

Outcomes Assessment Activities for the Political Science Program

The faculty of the Political Science program use a variety of methods for evaluating the student learning outcomes. These include a portfolio which contains transcripts, major papers written for courses in the discipline, co-curricular data and other pertinent information. The portfolios are evaluated by faculty members at the end of the student's senior year. Exams, internships, research projects with faculty members, and exit surveys are also used as part of the systemic assessment plan for the program. Finally, students take a senior capstone course that includes a major research project, class presentations, and critical thinking essays.

PHILOSOPHY PROGRAM

In addition to exploring the methods, ideas, problems and history of philosophy, the minor in philosophy trains students to think with rigor, clarity and precision. Since these qualities are valuable in virtually any discipline, the minor supports a wide range of majors or career tracks. Philosophy and its sub-discipline of ethics pair particularly well with history, politics, law, literature, the arts, the sciences, business, healthcare, and technology.

Program Goals

- To provide individual courses as well as an academic minor in philosophy;

- To sharpen students' critical thinking skills and to develop the abilities to speak and write in a clear, analytical manner;

- To develop students' understanding and philosophical methods and ideas, including their historical-cultural origins and contemporary applications; and

- To cultivate the habit of reflection that will allow students to apply their critical and philosophical skills in their personal and professional lives.

Expected Student Outcomes

- Students will be able to recognize, analyze, and logically evaluate arguments encountered in sources ranging from philosophical and academic texts to the popular media.

- Students will be able to construct and present clear, well-reasoned defenses of theses both verbally and in writing.

- Students will be able to recognize and assess the relevance of philosophical ideas and methods in the historical interplay of philosophy and culture.

- Students will be able to apply philosophical methods to conduct ethical, metaphysical, and epistemological analyses.

General Requirements

Students who wish to minor in philosophy must complete a minimum of 18 credit hours of approved philosophy courses with grades of C or better.

Specific Requirements for the Philosophy Minor

PHIL Courses		Titles	Credits
PHIL	102	Philosophical Literature	3
PHIL	201	Classics in Ethics	3
PHIL	204	Critical Reasoning OR	
PHIL	205	Deductive Logic	3
PHIL	293	History of Philosophy Seminar I	3
PHIL	393	History of Philosophy Seminar II	3
PHIL	493	History of Philosophy Seminar III	3
		TOTAL	18

Outcomes Assessment Activities

The coordinator of the Philosophy Program maintains a portfolio for each student with a declared minor in philosophy. Portfolios include a student's major papers written for the History of Philosophy Seminar cycle, transcripts, and other pertinent information. Student portfolios, in conjunction with indirect measures, form the basis for evaluating expected outcomes.

GEOGRAPHY

The department extends classes in Geography primarily for students who wish to gain Colorado teacher licensure. There is no major or minor in Geography, but students majoring in a variety of areas would benefit from the Geography classes; e.g., History and Political Science.

MASS COMMUNICATIONS DEPARTMENT AND CENTER FOR NEW MEDIA

Department Chair: Jennifer Mullen

Faculty: Bregar, Brengarth, Ebersole, Joyce, Lovato, Mullen, Steffen

KTSC-FM Manager: Mike Atencio

The Mass Communications Department and Center for New Media supports the mission of the University by offering an applied major that integrates technological innovation with a traditional humanities and social sciences curriculum. Students are prepared for careers in the media and related disciplines while also being given the ethical and aesthetic foundations to make those careers meaningful.

The 42 credit major in Mass Communications leads to the degrees of Bachelor of Arts (BA) and Bachelor of Science

(BS). A degree in Mass Communications leads to careers in print and online journalism reporting and editing for news, features and sports; advertising copywriting, design and sales; digital video and audio production for radio, television, and the Internet; interactive multi-media application for the Internet; and strategic public relations for government, nonprofits, and business.

An 18 credit core is the foundation of the major with emphasis areas that require 15 additional credit hours and applied coursework that requires 9 additional credit hours. Selected courses may have course specific fees.

The TODAY online news website and magazine are published as laboratory tools of the Mass Communications Department to serve the students, faculty and staff of CSU-Pueblo in addition to the Pueblo community. Editorial and management positions are awarded each semester after review of all applications from qualified students. The newspaper is funded through advertising revenue. The newspaper's advisor is a member of the Mass Communications faculty. Prerequisites: MCCNM 201 and declared major or minor.

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 Mission

The mission of the Mass Communications Department and 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.

Department Goals

1. Offer a marketable and professionally credible program.

- Provide a comprehensive foundation of media-oriented theory and practice.

- Emphasize writing as strategic and professional communication.

- Emphasize personal ethics and professional ethics codes.

- Insure curriculum meets standards of the professions represented.

2. Provide a student-centered experience for learning and advising.

- Create a proactive student-faculty advising experience.

- Create a collaborative department culture.

- Recognize student accomplishments and outstanding performance.

3. Create an applied learning environment with cutting-edge technology.

- Provide media laboratory opportunities for all majors.

- Offer a full range of internships at the junior and senior level.

- Provide technology for pedagogical and professional purposes.

- Create course content that is interactive, applied, and project-oriented.

4. Maintain a reputation for excellence.

- Maintain alumni relationships through an online database, annual alumni magazine, guest speakers, and professional networking.

- Conduct graduating senior surveys every semester and alum surveys every five years.

- Serve as mentors and role models for current students and alumni.

Student Learning Outcomes
(Based on Department Goal 1: Offer a marketable and professionally credible program.)

1. Students will display critical thinking skills, conveying complex ideas related to current issues and ethical expectations of mass media and related disciplines.

2. Students will write with clarity and organization utilizing the proper format, writing mechanics and audience focus, in a manner that is professionally competitive for an entry-level position in the discipline.

3. Students will demonstrate technological expertise related to the specific emphasis area that is professionally competitive for an entry-level position in their discipline.

4. Students will demonstrate command of subject, organization of thoughts, and skill at interpersonal communication in front of an audience.

Outcomes Assessment Activities

Student success is measured through a variety of methods that include classroom writing samples, portfolios of student work, professional internship evaluations, exit interviews, student employment upon graduation, and alumni feedback.

Each graduating senior creates an academic portfolio of all salient work or projects completed while in the department from participation in the capstone course, Mass Media Seminar. Department faculty review and evaluate a selection of portfolios each semester to assess student learning.

The Mass Communications Department and Center for New Media requires that the academic portfolio demonstrate a pattern of sustained academic growth and development of the major and minor, appropriate to the student's emphasis area.

The academic portfolio should reflect the quality and level of intellectual and scholarly work undertaken by the student while in the department, relative to the qualitative, quantitative, ethical, legal and aesthetic dimensions of the field. The appropriateness of the content is dictated by the student's emphasis area and is prescribed by the individual's advisor.

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.

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 and Center for New Media majors and minors to meet the minimum GPA standards set by the department and the University, it is expected that graduates will exceed these standards.

- MCCNM 101, Media and Society, cannot be counted towards social science and general education by Mass Communications majors.

THE MASS COMMUNICATIONS AND CENTER FOR NEW MEDIA MAJOR

Specific Requirements for the Major Core

MCCNM Courses		Titles	Credits
MCCNM	101	Media and Society	3
MCCNM	201	Introduction to Journalism	3
MCCNM	210	Intro to Integrated Communication	3
MCCNM	220	Introduction to Electronic Media	3
MCCNM	411	Media Law and Ethics	3
MCCNM	493	Seminar	3

TOTAL 18

CHOOSE ONE OF THREE EMPHASIS AREAS

Specific Requirements for the Emphasis in Electronic Media

Advisors: Sam Ebersole, Sam Lovato, and Justin Bregar

MCCNM Courses		Titles	Credits
MCCNM	318	Regulation of Electronic Media	3
MCCNM	320	Media Programming	3
MCCNM	336	Interactive Media	3
MCCNM	338	Global Communication	3
MCCNM	425	Audience Research Methodology	3
		TOTAL	15

Specific Requirements for the Emphasis in Integrated Communication

Advisor: Jennifer Mullen and Lauren Brengarth

MCCNM Courses		Titles	Credits
MCCNM	302	Advertising Writing.	3
MCCNM	321	Public Relations Case Problems	3
MCCNM	422	Writing for Public Relations	3
MCCNM	425	Audience Research Methodology	3
MCCNM	430	Integrated Communications Campaigns	3
		TOTAL	15

Specific Requirements for the Emphasis in Journalism

Advisors: Richard Joyce and Leticia Steffen

MCCNM Courses		Titles	Credits
MCCNM	304	Feature Writing	3
MCCNM	305	News Reporting	3
MCCNM	311	Copy Editing	3
MCCNM	312	Publication Design	3
MCCNM	445	Reporting Public Affairs	3
		TOTAL	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 Imaging	4
MCCNM	282	Digital Media Post Production	3
MCCNM	350	Advanced Media Lab	2-3
MCCNM	494	Field Experience	Varies

Note: Prerequisites may exist with some courses and Media Lab is required of all majors.

Co-curricular Requirements

1) The thrust of the Mass Communications Department/ Center for New Media is pragmatic, therefore, all majors must enroll in a minimum of one 2 or 3 credit lab. Faculty have discretion in curriculum, programming and enrollment of all media labs.

   - TODAY online newspaper and print magazine (print and online editorial, photography, audio/video, advertising)

   - KTSC-FM on-campus radio station (studio and field production, programming, promotion, talent)

   - KTSC-TV/RMPBS on-campus television station (studio production)

   - CNM Productions (field production)

   Students may earn a maximum of 9 credits in media labs.

2) In addition, Mass Communications and 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 9 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.

MILITARY SCIENCE (US ARMY)
(Reserve Officers' Training Corps Program)

Professor of Military Science: Lieutenant Colonel William J. Ryan; **Assistant Professors of Military Science:** Captain Jesse L. Dewitt, **Senior Military Science Instructors**: Sergeant First Class Gener Molina, Sergeant First Class Andrei Williamson

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 five-week 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	Titles	Credits
MSL 101	Leadership & Personal Development (F)	1
MSL 102	Introduction to Tactical Leadership (S)	1
MSL 201	Innovative Team Leadership (F)	2
MSL 202	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 two-year 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: Jennifer Shadle-Peters

Faculty: Barto, Beck, Chi, Creager, De Luca, Eastin, Eberhardt, Hudson, Ihm, Markowski, Metchkov, Mills, Turner, Veronika String Quartet (Afanassieva, Dobrotvorskaia, Garibova, Artmann)

The Music Department of Colorado State University-Pueblo seeks to promote excellence in musicianship and to equip students for a career in music. The major in music leads to a degree of Bachelor of Arts (BA).

Mission, Goals and Objectives

The **mission** of the Department of Music at Colorado State University-Pueblo is to prepare undergraduate students to function professionally in their chosen field of music within the larger context of a liberal education, to provide artistic enrichment for the community, and to serve as an artistic resource.

The **goals** of the Department of Music are:

- To prepare students to function professionally in their field of music,

- To provide appropriate musical experiences for students in the liberal arts program,

- To prepare students to pursue advanced study in their respective areas,

- To encourage in all students the development of musical sensitivity and an understanding of the aesthetic process, and

- To provide for the University and community the enrichment afforded by a variety of musical experiences.

The **objectives** of the Department of Music used to accomplish the goals outlined above include:

- To offer courses and related experiences of an appropriate nature and quality and of sufficient breadth to allow the student adequate opportunity to acquire the necessary knowledge and skills;

- To offer and encourage student participation in a variety of ensembles and other instructional opportunities, allowing for varying musical tastes, experiences, and abilities;

- To challenge each music student to progress beyond the minimum requirements of a degree program, and to provide opportunities for growth beyond classroom instruction;

- To present music in a manner that promotes it as an art form; and

- To offer and promote quality performance and instruction, and to serve as an artistic resource.

Expected Student Outcomes

Upon completion of the Bachelor of Arts degree in Music, students will

- Read, analyze, and perform music with fluency in at least one performance medium and in a variety of performance styles;

- Use the piano proficiently as an instrument for independent study of music theory, analysis of scores, and preparation of compositions or arrangements, as appropriate to the common tasks of a professional musician;

- Demonstrate proficiency in aural recognition and analysis of music, and in singing musical lines at sight, as appropriate to the common tasks of a professional musician;

- Recognize and describe representative selections of music from all the significant style periods and genres of western art music;

- Create arrangements and original compositions utilizing the recognized ranges and idioms of orchestral and band instruments and of vocal ensembles; and

- Conduct large and small ensembles in their primary performance medium.

In addition, students in the *Performance Emphasis* program will

- Prepare and present in public a wide selection of repertoire representative of the highest standard of performance technique and style appropriate to young professional artists; and

- In conjunction with recital performances, prepare scholarly program notes on the repertoire being presented and work closely with administrative staff to complete the copy and format of professional publicity documents.

In addition, students in the *Music Education Emphasis* program will

- Demonstrate through field experiences and student teaching the necessary skills and dispositions for teaching music in a variety of public school settings;

- Articulate in written documents addressed to the general audience (such as parents, school board members, or community at large) a well-grounded philosophy of music education; and

- Create instructional plans, long-range curriculum outlines, and assessment instruments for music education at elementary and secondary levels, following Colorado Content Area Learning Standards and incorporating recognized best practices in music pedagogy.

Outcomes Assessment Activities

Department faculty hear all music majors perform prepared solos at least three times per semester, with both formative and summative assessments recorded at significant points, such as final juries and the Junior Qualifying Exam at the end of the sophomore year. In addition, every primary and secondary ensemble performs at least one concert per semester. From the accumulated success of these performances, the faculty can determine and assess:

- Attainment of performing skills as students progress through the curriculum;

- Effectiveness of recruiting and retention in each instrumental area and vocal range; and

- Degree of knowledgeable application of the concepts of music theory and history to the sensitive performance of a wide range of repertoire.

Every music major must pass an oral exam over the first two years' work before being allowed to continue in the 300-level courses of the music degree. This Junior

Qualifying Exam holds students accountable for long-term learning in the discipline, but it also reveals patterns of effective or ineffective instruction across the department for program assessment purposes. Every music major must also complete a satisfactory demonstration of piano proficiency before graduation.

Students graduating in the emphasis areas of Performance or Music Education are required to present senior level recitals and (for Music Education) to pass the national standardized PLACE test. A general capstone evaluation for all music majors is being planned; the target date for implementation is the 2012-2013 academic year.

Requirements

GPA

Students are required to complete all major and minor courses with a grade of C or better and to maintain a cumulative GPA of 2.5 or better.

Minor Area

The ability to think across disciplines contributes significantly to the educational experience. Music majors 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 <u>Bachelor of Arts in Music</u> 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 <u>Bachelor of Arts in Music: Music Performance emphasis</u> is appropriate for those students who plan to perform, teach privately, or pursue further study at the graduate level.

The <u>Bachelor of Arts in Music: Music Education emphasis</u> 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 <u>Minor in Music</u> 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		Titles	Credits
MUS	150	Music Theory I	3
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 (6 semesters)	0
MUS	xxx*	Primary Ensemble (6 semesters, 2 upper division)	6
MUS	xxx**	Secondary Ensemble (2 semesters, 1 upper division) (**Note**: Music Ed emphasis exempt from this credit requirement.)	2

MUS   xxx   Major Applied Lesson 12
                   (6 semesters, 2 upper division)
MUS   127   Functional Piano I: Beginning................1
                   (may be repeated)
MUS   229   Piano Proficiency Completion.................1
MUS   103   Music & Computer Technology I 1
MUS   303   Music & Computer Technology II 1
                   (**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 students complete either of the following in lieu of Functional Piano courses:

MUS   346   Piano Literature
                   OR
MUS   347   Piano Pedagogy..................................2

                   TOTAL   2

Free Electives 35-37

Degree Total 120

****Primary** ensembles: (All courses MUS)

	Fr	Soph	Jr	Sr
Concert Choir	102	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
Orchestra	144	244	344	444

*****Secondary** Ensembles: (All courses MUS)

	Fr	Soph	Jr	Sr
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

Music Core...48

General Education 35

NOTE: must also complete two semesters of a Foreign Language.

Music Performance Emphasis Requirements

MUS Courses		Titles	Credits
MUS	305	Music History I	
		OR	
MUS	355	Music History II (other than core)	3
MUS	350	Theory V-Composition and Analysis	3
MUS	x01	Music Performance Symposium	0
		(2 semesters)	
MUS	380-399	Junior Recital	2
MUS	470-489	Senior Recital	2
MUS	xxx	Primary Ensemble	2
		(2 semester, upper division)	
MUS	359	Advanced Conducting	2

                   TOTAL   14

Note: Vocal students must also complete the following:

MUS   323   Diction for Singers 2

                   TOTAL   2

Note: Piano students must also complete the following:

MUS   346   Piano Literature 2
                   (Substitute for 2 credits of Functional Piano, MUS 127 and 227)
MUS   347   Piano Pedagogy 2

                   TOTAL   4

Music Electives 19-23

Degree Total 120

Specific Requirements Bachelor of Arts in Music: Music Education Emphasis

Music Core...(Music Ed) 45

General Education 35

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

Music Education Emphasis Requirements

MUS Courses		Titles	Credits
MUS	305	Music History I	
		OR	
MUS	355	Music History II (other than core)	3
MUS	306	Technology for Music Educators (in lieu of MUS 303)	2
MUS	x01	Music Performance Symposium (1 semester)	0
MUS	470-489	Senior Recital	2
MUS	359	Advanced Conducting	2
MUS	113	Vocal Techniques and Diction	1
MUS	223	Percussion Techniques	1
MUS	233	Woodwind Techniques	1
MUS	243	String Techniques	1
MUS	253	Brass Techniques	1
MUS	340	Elementary Music Methods	3
MUS	440	Secondary Music Methods	3
		TOTAL	20

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
MUS	127	Functional Piano I: Beginning	1
MUS	xxx	Ensemble (4 semesters)	4
MUS	x01	Music Performance Symposium (4 semesters)	0
MUS	150	Music Theory I	3
MUS	151	Aural Skills I	1
MUS	210	Music Theory II	3
MUS	211	Aural Skills II	1
MUS	xxx	Applied, non major (4 semesters)	4
		TOTAL	20

Master of Education/Music Emphasis

Beginning in Summer 2008, the Music Department began phasing in courses at the 500-level to fulfill an 18-credit emphasis area in the Master of Education degree. Most courses will be offered in concentrated summer sessions, to enable teachers to complete credits between school terms. Admission requirements include a bachelor's degree and teacher licensure; interested persons should read the full program description in the *Master of Education* section of this catalog, and contact the Music Department for specific questions.

Core Knowledge Areas, 12 credits

MUS Courses		Titles	Credits
MUS	545	Current Issues in Music Education	3
MUS	559	Advanced Music Analysis	3
MUS	565	Methods in Research in Music ED	3
One of the following:			3
MUS	540	Kodaly Method for Music Education	3
MUS	550	Instrumental Conducting	3
MUS	560	Choral Conducting	3
		TOTAL	12

Advanced Skill Areas, 6 credits from the following:

MUS Courses		Titles	Credits
MUS	513	Advanced Vocal Pedagogy	1
MUS	523	Advanced Percussion Pedagogy	1
MUS	533	Advanced String Pedagogy	1
MUS	543	Advanced Woodwind Pedagogy	1
MUS	553	Advanced Brass Pedagogy	1
MUS*			2
		TOTAL	6

*Applicable 500-level applied lessons or ensembles courses are still to be developed for approval and inclusion in the catalog.

Additional Information

The Department of Music Student Handbook is intended as a supplement to the University Catalog and is binding in all matters relating to the Department of Music at Colorado State University-Pueblo. A copy of the handbook may be found on the University Department of Music website, and printed copies are located in the Music office (A/M 175) and in all music faculty offices.

The Colorado State University-Pueblo Department of Music is an accredited member of the National Association of Schools of Music.

NON-PROFIT ADMINISTRATION MINOR

Advisor: Jennifer Mullen, 549-2856

The Minor in Non-Profit Administration is a multi-disciplinary 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

Core Courses: .... 9 credits

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 I	3
BUSAD	270	Business Communication	3
ECON	202	Principles of Microeconomics	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	310	Introduction to Hispanic Literature	3
SW	350	Social Welfare Policy	3
SW	324	Social Work Intervention III	3

Internship: .... 3 credits

Students are required to earn a 3-credit internship in a nonprofit organization to be approved by the nonprofit advisor.

PSYCHOLOGY DEPARTMENT

Department Chair: L. Madrid

Faculty: Bridgmon, Brett-Green, Levy, Madrid, Pratarelli, Yescavage

Psychology is a field of inquiry which is called the science of behavior and answers questions about how and why organisms behave as they do. The field of psychology is enormous with many sub fields. Some areas pertain to animals, while others are focused on the behavior of humans. Still other areas focus on, abnormal behavior or complex social and emotional behavior while the cognitive area focuses on how people perceive, learn, remember, and think.

Psychology is a discipline based on theoretical perspectives and information gained through research. Therefore, the psychology major is based on understanding theory as well as learning the methods of inquiry, evaluation, and drawing appropriate conclusions. These skills are useful for problem solving in many applied settings.

The bachelor's degree program in psychology at CSU-Pueblo 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 CSU-Pueblo, 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

- Apply skills in the use of parametric and nonparametric statistics in a public forum such as an oral presentation or a poster session.

- Apply skills in the use of between-subjects or within-subjects research designs for completing an empirically-based research study.

- Apply skills in the diagnosis and therapy of maladaptive behaviors to individuals and groups in a clinical setting.

- Application of skills in the use of SPSS to analyze, summarize, and report data in an empirically-based research study.

- Application of skills in traditional and contemporary counseling and psychotherapy for those students who have selected to study psychology with a clinical focus.

These expected learning outcomes apply for both the BA and the BS degrees in psychology.

Bachelor of Science Degree in Psychology

Students must complete all of the major degree requirements. In addition, students must complete 8 credits in the natural sciences or math (BIOL, CHEM, GEOL, MATH, or PHYS) beyond their general education courses. EXHP 162 and EXHP 162L cannot be used to satisfy the additional science requirement.

Bachelor of Arts Degree in Psychology

Students must complete all of the major degree requirements. In addition, students must complete the foreign language 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	Credits
PSYCH	100	General Psychology	3
PSYCH	103	Introductory Psychology for Majors	2
PSYCH	207/L	Quantitative Research Methods I/Lab	4
PSYCH	209/L	Quantitative Research Methods II/Lab	4
PSYCH	401	History & Systems of Psychology	3

Two of the following courses 6
PSYCH	311	Theories of Personality
PSYCH	352	Social Psychology
PSYCH	353	Advanced Developmental Psych
PSYCH	362	Abnormal Psychology

One of the following courses 3
PSYCH	336	Learning and Motivation
PSYCH	337	Memory and Cognition

One of the following courses with lab 4
PSYCH	331/L	Physiological Psychology/Lab
PSYCH	334/L	Perception/Lab

One of the following courses 3
PSYCH	314	Environmental Psychology
PSYCH	315	Industrial/Organizational Psych
PSYCH	342	Educational Psychology
PSYCH	471	Clinical Psychology

TOTAL   32

PSYCH ELECTIVES

A total of 10 credits of Psychology Electives are required for the major.

PSYCH Courses		Titles	Credits
PSYCH	110	Improving Memory	2
PSYCH	151	Human Development	3
PSYCH	205	Intro to Sport Psychology	3
PSYCH	211	Women and Society	3
PSYCH	212	Sexism and Racism in America	3
PSYCH	220	Drugs and Behavior	3
PSYCH	222	Understanding Animal Behavior	3
PSYCH	231	Marriage and Family Relationships	3
PSYCH	241	Human Sexuality	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	Systems of Counseling and Psychotherapy/Lab	4

PSYCH	465	Behavior Modification	3
PSYCH	475	Group Process	3
PSYCH	492	Research	1-3
PSYCH	494	Field Experience	1-12
PSYCH	495	Independent Study	1-3
Basic Core Requirements			32
Psychology Electives			10

TOTAL 42

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: 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.

Outcome Assessment Activities

- The presentation of an empirically-based research project immediately following PSYCH 209/209L. Each student presentation will be evaluated with the use of the Research Presentation Evaluation Form by psychology faculty.

- The use of counseling skills in a clinical field experience. Each student will be evaluated by the field experience agency and the psychology field coordinator with the use of the Field Experience Evaluation Form.

- An alumni survey is conducted every 5-7 years to assess the relevance of psychology courses in career development.

SOCIAL WORK DEPARTMENT

Department Chair: Carol L. Langer

Faculty: Baca, Gonzales, Reilly-Sandoval, Richmond

The profession of social work is dedicated to helping individuals, families, groups, neighborhoods and communities meet basic human needs within the context of culture and society. Fundamental to social work practice is the enhancement of social functioning from a person-in-environment perspective. Particular attention is given to populations at risk, services that have been developed to meet client needs, and societal change to achieve a more humane and just society.

The Department of Social Work has been continuously accredited by the Council on Social Work Education (CSWE) since 1982. Students who earn a BSW degree from Colorado State University-Pueblo may be eligible for advanced standing in a social work graduate program. However, requirements for advanced standing vary with each graduate social work program.

Mission Statement

"As part of Colorado State University-Pueblo, a regional comprehensive university, the social work program prepares students for beginning generalist practice with diverse client populations across systems of all sizes, including individuals, families, groups, organizations, and communities."

Program Goals and Objectives

1. Provide BSW students with a range of skills, attitudes, and knowledge grounded in social work values and ethics.

   ### *Objectives*

   - Students will apply social work values and ethics to social work practice with diverse systems.

   - Students will evaluate the professional use of self in interactions with diverse systems.

2. Develop culturally competent professionals who can intervene appropriately in systems of all sizes with emphasis on regional populations.

   ### *Objectives*

   - Students will develop culturally competent knowledge, values and skills for beginning level social work practice with diverse systems.

   - Students will demonstrate the ability to practice with diverse populations in a multicultural environment including Chicanos, Mexicans, and First Nations.

3. Develop the ability of BSW students to advocate for social and economic justice with systems of all sizes.

   ### *Objectives*

   - Students will identify factors which impact the attainment of social and economic justice for diverse systems.

   - Students will select and apply appropriate intervention methods to develop and enhance social and economic justice across diverse systems.

4. Engage BSW students in a process of practice-informed research and research-informed practice.

   ### *Objectives*

   - Students will use critical thinking skills to develop knowledge and understanding of research

relevant to beginning social work practice with diverse systems.

- Students will interpret, evaluate and implement relevant research, linking theory to practice, as they engage in beginning level social work practice with diverse systems.

Student Learning Outcomes

Upon completion of the Baccalaureate Social Work Program, students will

- Identify as professional social workers.

- Apply social work ethical principles to guide professional practice.

- Apply critical thinking to inform and communicate professional judgments.

- Engage diversity and difference in practice.

- Advance human rights and social and economic justice.

- Engage in research-informed practice and practice-informed research.

- Apply knowledge of human behavior and the social environment.

- Engage in policy practice to advance social and economic well-being and to deliver effective social work services.

- Respond to contexts that shape practice.

- Engage, assess, intervene, and evaluate with individuals, families, groups, organizations, and communities.

Outcomes Assessment Activities

The faculty of the Department of Social Work uses a variety of methods for evaluating the student learning outcomes. These include a senior field placement consisting of 448 clock hours under the supervision of a task/field supervisor and with a faculty liaison. An assessment of the field experience completed by the field supervisor is a direct measure. During the field seminar, students will complete and collect artifacts for a portfolio which will be submitted to blind evaluation of academic content by faculty. Students will complete a self-report survey where each learning outcome and associated practice behaviors are measured indirectly. In addition in the last semester of the field experience, students must complete a standardized knowledge-based assessment

and a values and ethics post-test. The pre-test is given during SW 225. Embedded assessment measures include presentations, papers, projects, and conducting individual and group practice sessions. In addition, employer and alumni surveys are systematically administered as part of assessment. The results of these assessment activities are used to improve the program and student learning.

Requirements for the Social Work Major

General Education Foundation Courses

General Education .... 35 credit hours

As a base for professional intervention, social work practice requires mastery of knowledge and skills commonly taught in the liberal arts. Students planning to major in social work should select general education courses that develop proficiency in verbal and written communication, competency in problem solving, and promote critical and analytical thinking. Courses that incorporate human growth and behavior, diversity, and the interaction of individuals, groups, neighborhoods, communities and society, within the context of social, economic, political, and governmental systems, provide a substantive base for majors. Students should complete the University's general education requirements prior to enrollment in upper division social work courses.

Professional Foundation Courses......... 37 credit hours

Specified courses...21
Basic social work courses 16

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
CS	101	Intro to Chicano Studies OR	
CS/SW	230	Chicano: Social and Psychological Study 3
PSYCH	100	General Psychology.............................3
SOC	101	Intro to Sociology 3
SW	210	Statistics for Social Worker..................3 (or an approved statistics course)
		A course covering women's studies 3

TOTAL   18

A course in economics or political science may be taken with upper-level social work course 3

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 3
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
SW	225	Social Work Policies and Procedures ...1

TOTAL   16

Admission into the Social Work Program

The social work major is a professional program and as such requires two additional admission processes following admission into the University: the first is admission into the social work program and the second is admission into the field practicum. **Social work majors should be accepted into the program prior to enrolling in required 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 is made regarding admission into the program. The Department Chair will notify each student in writing of his/her status: 1) admission into the program, 2) conditional admission into the program or 3) denial of admission into the program.

Reasons for conditional admission into the program will be identified in the letter, as well as corrective actions that must be taken. Students who are conditionally admitted will have their progress followed by the Department Standards and Academic Progress Committee. This committee will also receive referrals from instructors within the department and from the department chair. Such referrals may include issues of academic or behavioral nature. (See the department student handbook for a complete description of this committee and its functions.) When the requirements for admission into the program have been satisfied, the student's status will be revised from conditional acceptance to admission into the program. If for some reason a student is not admitted to the program, the reasons for this decision will be identified in the letter to the student, along with necessary corrective actions. Reapplication may be made once corrective action has been taken.

Social Work Professional Practice Courses

Students must earn a grade of C or above in all social work professional practice courses. The following upper division social work courses are mandatory for completion of the BSW degree and require acceptance into the major prior to enrollment.

SW Courses		Titles	Credits
SW	310	Social Work Theory 3
SW	320	Human Diversity in Practice..................3
SW	322	Social Work Intervention I 3
SW	323	Social Work Intervention II 3
SW	324	Social Work Intervention III 3
SW	350	Social Welfare Policy...........................3
SW	481	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

TOTAL   37

Admission into the Social Work Field Practicum

The Field Practicum

Social work majors are required to apply for admission into the field practicum. All social work courses must be completed prior to entering field. 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. If an individual does not take any social work courses for one calendar year, the individual must reapply for admission to the major.

Behavioral Requirements

Behaviors which may result in non-acceptance into the major, field practicum, or withdrawal from the social work major may include, but are not limited to, the following:

1. Serious or repeated violation of the *NASW Code of Ethics and Standards of Practice*;

2. Violation of CSU-Pueblo's academic dishonesty policy or Student Code of Conduct;

3. Unprofessional social work conduct;

4. Demonstrated unwillingness or inability to use supervision;

5. Personal problems that seriously and consistently interfere with the conscious and professional use of self in a helping relationship;

6. Inability to accept appropriate evaluation from superiors or to modify one's professional behaviors as requested;

7. Inappropriate or disruptive behavior toward colleagues, faculty, staff or peers; and/or

8. Consistent failure to demonstrate interpersonal skills necessary to form effective professional relationships.

See student handbook for more information.

Electives

A minimum of 120 semester credit hours are required for the BSW degree. At least 40 hours must be taken in upper division (300-400 level) courses. Students may use social work elective courses or courses from other departments to achieve the total credit hours required. 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	3
SW	326	Social Work Practice with Older Adults	3

SW	327	Practice with Abused and Neglected Children 3
SW	490	Special Projects.................................1-5
SW	491	Special Topics 3
SW	495	Independent Study...............................3

SOCIOLOGY/ANTHROPOLOGY/ SOCIAL SCIENCE DEPARTMENT
(Including Criminology)

Department Chair: S. Calhoun-Stuber

Faculty: Calhoun-Stuber, Forsyth, Gomme, Green, McGettigan, Messer, Spates

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.

Expected Student Outcomes

Upon completion of the Sociology program, students will

- Compare and contrast the major theoretical perspectives that inform sociological understanding, analysis, and explanation.

- Apply a range of sociological research methods to describe, explore, and analyze complex social relations, institutions, organizational structures, and cultures.

- Apply the sociological perspective to a range of disciplinary sub-areas, especially criminology, to increase comprehension of contemporary substantive social issues.

- Think critically about the relationship between personal social experiences and societies' structural, institutional, and organizational features.

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
			TOTAL 9

General Emphasis

Students will complete the above core (9 hours) and then will select at least 27 additional credit hours of sociology courses, which may include six hours from anthropology. Courses must be approved by the advisor. At least 12 hours must be upper-division courses (300- 400 level).

Criminology Emphasis

Students will complete the three (above) core sociology courses plus three (below) criminology core courses. Further, they will complete 18 hours (six courses) of criminology electives.

Criminology electives are indicated by * in the list of all sociology courses below:

Criminology Core Courses: (9 hours)

SOC Courses		Titles	Credits
SOC	203	Criminal Justice System	3
SOC	303	Crime and Deviance	3
SOC	306	Delinquency & Juvenile Justice	3

Sociology Courses (*indicates criminology elective)

SOC Courses		Titles
SOC/POLSC/PSYCH/WS		
	105	Understanding Human Diversity
SOC	155	Minority and Ethnic Relations*
SOC	201	Social Problems*
SOC	203	Criminal Justice System
SOC	206	Gender & Society
SOC/ANTHR	212	The Forensics of Bones*
SOC/PSYCH/WS		
	231	Marriage & Family Relationships
SOC/ANTHR	250	The Sacred in Culture
SOC/ANTHR	252	Culture and Personality
SOC	302	Collective Behavior and Social Movements*
SOC	303	Crime and Deviance
SOC/WS	305	Crime and Women*
SOC	306	Delinquency & Juvenile Justice
SOC	308	Popular Culture*
SOC	320	Modern Social Perspectives*
SOC/PSYCH	352	Social Psychology
SOC	353	Penology*
SOC	354	Urban Sociology*
SOC	355	Political Sociology*
SOC	356	Social Stratification*
SOC	358	Film & Society*
SOC	359	Community Corrections*
SOC/ANTHR	401	Health, Culture, & Society
SOC/ANTHR	402	Aging, Culture, & Society
SOC/WS	403	Human Sexuality and Social Behavior
SOC	404	Poverty*
SOC	405	Law and Society*
SOC	406	Sociology of Small Groups
SOC/WS	407	Family Violence*
SOC	408	Science, Technology, & the Future*
SOC	409	Victimology*
SOC	410	Structural & Elite Crime*
SOC	411	Police and Society*
SOC	412	Occupations & Professions
SOC	413	Patterns of Homicide*
SOC	414	Serial Murder *
SOC	415	Forensic Criminology*
SOC/ANTHR	416	Crime & the Mind*
SOC	417	Forensics & Homicide Investigations*
SOC	418	Crime, Drugs and Social Policy*
SOC	419	Vice Crime*
SOC	420	Explaining Crime*
SOC	421	Homicide, Courts & Corrections*
SOC	422	Terrorism and Mass Murder*
SOC	424	Organized Crime*
SOC	426	Violence and Rioting*
SOC/HIST/WS	428	Women and Work
SOC	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

The primary method of assessment for the Sociology program is the Major Field Achievement Test (MFAT). Developed by the Educational Testing Services, this standardized testing instrument assesses student capacities in a number of critical areas of sociology: general theory, methodology and statistics, deviance and social problems, demography and urban/rural community, multiculturalism, social institutions, social psychology, gender, and globalization. It also assesses two additional learning capacities: core sociology and critical thinking.

MFATs are completed annually by a sample of graduating seniors. Test outcomes are compared to those of other students at other American universities in order to identify the sociology program's strengths and weaknesses. The results of these assessment processes are used to improve the program and further enhance student learning.

A secondary method of assessment for the Sociology program comprises a customer satisfaction survey distributed to all graduating seniors. Respondents report their qualitative perceptions of the adequacy of customer services (teaching, advising, learning supports, internships, etc.), the degree of learning, skill acquisition, discipline

mastery, and the sufficiency of vocational training. Survey results are used to bolster customer service initiatives and to strengthen curricular delivery systems.

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.

Expected Student Outcomes

Upon completion of the Anthropology program, students will

- Comprehend intellectual problems and engage in critical thinking that reflects logical inquiry and knowledge of pertinent information.

- Demonstrate knowledge and experience of cultural and sub-cultural groups other than their own.

- Understand a spectrum of anthropological sub-divisions and 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, corrections/ criminology, social and educational administration, law and mass communications.

Expected Student Outcomes

Upon completion of the Social Science program, students will

- Function as knowledgeable and responsible individual citizens in society.

- Understand fundamentals of the major disciplinary approaches to the study of social life, including economics, history, sociology, geography, and political science.

- Comprehend modern social institutions and coming changes and conflicts within those institutions.

- Demonstrate awareness of and appreciation for the cultural and ethnic diversity of modern society.

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 Chairperson of English and Foreign Languages, Katherine Frank, at (719) 549-2886.

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.

Expected Student Outcomes

- Students will be able to demonstrate a working knowledge of women's participation in, contribution to, and transformation of areas of social life including culture, society, politics, economics, and religion.

- Students will be able to demonstrate a working knowledge of institutionalized discrimination and violence based on gender.

- Students will be able to demonstrate a critical understanding of gender from national and global perspective.

- Students will be able to demonstrate and apply the basic concepts, theories and methods in gender studies in national and global contexts.

Specific Requirements for the Women's Studies Minor

Courses		Titles	Credits
WS	100	Introduction to Women's Studies	3
WS	301	Theories of Gender & Culture	3
WS/CS	306	La Chicana OR	
WS/CS	401	Third World Feminisms	3

Senior Capstone Experience in the form of one
of the following for 3 credits 3

	WS	490	Special Projects
	WS	492	Research
	WS	493	Seminar
	WS	494	Field Experience
	WS	498	Internship

Women's Studies Electives 9

TOTAL   21

WS Electives:

Courses		Titles	Credits
WS/SOC	206	Gender and Society	3
WS/PSYCH	211	Women and Society	3
WS/PSYCH	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	235	Women and Media	3
WS/SOC	305	Crime and Women	3
WS/CS	306	La Chicana	3
WS/MCCNM	330	Gender and Film	3
WS/ENG/SPCOM	335	Gender and Communication	3
WS/ENG	340	Women in Literature	3
WS/CS	341	Chicana Writers	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	291/491	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 549-2620.

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
      Biology (MS)
      Biochemistry (MS)

Minors: Biology
      Professional Biology

Chemistry

Majors: Chemistry (BS)
      Emphasis Areas:
         ASC Certified
         Biochemistry
         Pre-Medicine
         Pre-Pharmacy
         Pre-Veterinary
         Secondary Teaching Certification
      Chemistry (MS)
      Biochemistry (MS)

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 (CSM) offers quality, competitive Bachelor's and Master's degree programs that prepare graduates for success in professional and graduate programs and for careers in the biological and physical sciences and mathematics. The College also supports a strong general education program by providing core curricula in science and mathematics, for students pursuing careers in the health and environmental sciences, engineering, technology, and teacher education. The CSM provides advanced learning opportunities for students via faculty mentored research projects and internships that promote the discovery of new information and the application of new knowledge. The CSM supports the community, region and related professions through outreach including initiatives that enhance economic development, scientific literacy, and 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 graduate programs in natural sciences with MS degrees in biochemistry, biology, and chemistry that can be obtained separately or along with the bachelors' degree in a combined five-year, 3+2 program.

Departments of biology, chemistry, and mathematics/ physics provide versatile major programs with select emphasis areas and minors characterized by appropriate solid fundamental science and mathematics curricula, coupled with specialized and often interdisciplinary courses. Emphasis areas within major programs and minors provide preparation for future careers in areas as diverse as medicine, pharmacy, teaching (certification for elementary and secondary), 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 recently renovated buildings, totaling over 149,000 gross square feet and $18 million in improvements including a technology enhanced infrastructure to deliver state-of-the-art instruction in both lecture and laboratory environments. Programs incorporate use of an impressive collection of advanced instrumentation, equipment, and software in the curriculum, providing graduates advanced skills and a competitive edge within respective professions in our modern and technologically advanced society.

MASTERS DEGREE IN BIOLOGY 3+2 PLAN (BS/MS)

A feature of the Biology MS program is the 3+2 plan which gives qualified advanced-level undergraduate students the opportunity to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. With this plan, students are moved quickly toward expanding their academic and scientific horizons based on the student's abilities and personal motivation. Students in the 3+2 plan are expected to successfully complete the requirements for both the BS and MS degrees by the end of their fifth year in college. Students are simultaneously awarded both the BS and MS degrees in five years, thus shortening the normal time to receive both degrees from six years to five years. They must apply and be admitted into the Biology MS program by the Spring semester of their junior year (preferred) or by the start of the Fall semester of the senior year and meet the course requirements listed below. Students applying to the 3+2 plan must have a minimum 3.0 overall GPA and a minimum 3.25 GPA in their biology coursework.

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

1. A completed Biology MS application form;

2. A CSU-Pueblo transcript;

3. Two letters of recommendation from CSU-Pueblo faculty; and

4. A statement of research interests.

5. Combined GRE scores above 1000 (students may be admitted into the 3+2 program before taking the GRE; however, they must submit satisfactory GRE scores by the last day of finals at the end of their first semester in the 3+2 Biology MS program to remain in the program).

Before being admitted to the 3+2 plan, students are expected to have completed or be enrolled in the following course work.

Courses		Titles
BIOL	301/L	General Microbiology + Lab
BIOL	350	Mendelian and Population Genetics
BIOL	351	Molecular Biology and Genetics
CHEM	302/L	Organic Chemistry II + Lab
PHYS	202/L	Principles of Physics II + Lab
MATH	156	Introduction to Statistics
		OR
MATH	221	Applied Calculus: An Intuitive Approach

BIOLOGY DEPARTMENT

Department Chair: Helen Caprioglio

Faculty: D. Caprioglio, Diawara, Gabaldón, Herrmann, Luscombe, 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-optometry, pre-physical therapy, pre-occupational therapy, pre-pharmacy, 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

- Students will develop a broad-based knowledge of concepts and terminology in molecular, cellular, organismal, and ecological biology.

- Students will develop a supporting knowledge of concepts and terminology in the related fields of mathematics, physics, and chemistry.

- Students will develop skills in reading and interpreting the scientific literature and in presenting a synthesis of it accurately in oral and written form.

- Students will demonstrate critical thinking and problem solving skills using experimental design and the scientific method.

- Students will evaluate the scientific validity of information and ideas.

Outcomes Assessment Activities

Assessment of students' improvement in intellectual skills, knowledge and capacities from entrance to graduation will be accomplished through the use of several tools. Exams and course assignments will be used as one measure of the student's proficiency in writing skills, acquisition of knowledge, communication, problem solving and laboratory skills. All majors will take a Senior Seminar that requires scientific literature interpretation along with oral and written presentations evaluated by peers and department faculty. Seniors will also take the Biology Field Achievement Test, which measures Colorado State University-Pueblo students' content knowledge and analytical skills against national norms.

General Requirements

- Students majoring in biology must receive a grade of C or better (2.000) in all core biology courses.

- Students graduating with a BS in biology must have at least a cumulative GPA of 2.000 in the major area. A cumulative GPA of 2.600 in the major area is required for admission to the teacher education program.

- Transfer students are required to earn a minimum of 15 semester credit hours in approved Biology upper division courses from CSU-Pueblo, including BIOL 493 (Seminar), for graduation with a BS degree in Biology.

- Students majoring in biology must demonstrate computer literacy. This can be met by CIS 100, CIS 103 and CIS 104 courses.

- Graduates are encouraged to complete a minor outside the biology department.

Core Requirements for the Biology Major

BIOL Courses		Titles	Credits
BIOL	171	Career Planning I	1
BIOL	181/L	College Biology I/Organismal Bio/Lab	4
BIOL	182/L	College Biology II/Cellular Bio/Lab	4
BIOL	201/L	Botany/Lab OR	
BIOL	202/L	Zoology/Lab	4
BIOL	301/L	General Microbiology/Lab	5
BIOL	350	Mendelian & Population Genetics	2
BIOL	351	Molecular Biology and Genetics	2

Courses		Titles	Credits
BIOL	352	Evolutionary Biology and Ecology	3
BIOL	412/L	Cellular Biology/Lab	
		OR	
BIOL	413/L	Plant Physiology/Lab	
		OR	
BIOL	414/L	Vertebrate Physiology/Lab	4
BIOL	493	Seminar	1
		TOTAL	**30**

- ***Basic Biology Emphasis***

	Credits
Required Biology Core Courses	30
Advisor-Approved Upper Division Biology Electives	15
TOTAL	**45**

Required Support Courses

Courses		Titles	Credits
CHEM	121/L	General Chemistry I/Lab	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 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	**38-40**

	Credits
Institutional and General Education	21
General Electives	14-16
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 with BIOL 201/L and 202/L			34
BIOL	453/L	Ecology/Lab	4
BIOL	462	Environmental Management	3
Advisor approved Upper Division Biology Electives			4
		TOTAL	**45**

Consult with academic advisor for other requirements, which vary with emphasis.

- ***Cellular and Molecular Biosciences Emphasis***

This emphasis includes Cellular & Molecular, Bioinformatics, and Medical Technology. Also 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			30
BIOL	351L	Advanced Genetics & Molecular Biology Lab	2
CHEM	311	Survey of Biochemistry OR	
CHEM	411	Biochemistry I	3
Advisor approved Upper Division Biology Electives			10
		TOTAL	**45**

Bioinformatics

Courses		Titles	Credits
Biology required core with BIOL 412/L			30
BIOL	351L	Advanced Genetics & Molecular Biology Lab	2
CHEM	411	Biochemistry I	3

Courses		Titles	Credits
BIOL	450/L	Survey of Genomics and Bioinformatics/Lab	3
Advisor approved Upper Division Biology Electives			5

TOTAL   43

Required Support Courses

Courses		Titles	Credits
CHEM	121/L	General Chemistry I/Lab	5
CHEM	122/L	General Chemistry II/Lab	5
CHEM	301/L	Organic Chemistry I/Lab	5
CHEM	302/L	Organic Chemistry II/Lab	5
CHEM	412/L	Biochemistry II/Lab	5
CIS	171	Introduction to Java Programming	4
MATH	126	Calculus & Analytic Geometry I	5
MATH	224	Calculus & Analytic Geometry II	5
MATH	256	Probability for Engineers & Scientists	3
MATH	356	Statistics for Engineers & Scientists	3
PHYS	201/L	Principles of Physics I/Lab AND	
PHYS	202/L	Principles of Physics II/Lab OR	8
PHYS	221/L	General Physics I/Lab AND	
PHYS	222/L	General Physics II/Lab	10
SPCOM	103	Speaking and Listening (H)	3

TOTAL   56-58

Institutional and General Education 21

Total credit hours..120-122

• *Biology/Chemistry Double Major Emphasis*

Courses	Titles	Credits
Required Biology core with BIOL 493 or CHEM 493, Seminar		30
Advisor Approved Biology electives		10

TOTAL   40

Required Support Courses

Courses		Titles	Credits
MATH	126	Calculus & Analytic Geometry I	5
MATH	224	Calculus & Analytic Geometry II	5
PHYS	201/L	Principles of Physics I/Lab AND	
PHYS	202/L	Principles of Physics II/Lab OR	8
PHYS	221/L	General Physics I/Lab AND	
PHYS	222/L	General Physics II/Lab	10

Courses		Titles	Credits
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*

Courses		Titles	Credits
BIOL	181/L	College Biology I/Organismal Bio/Lab	4
BIOL	182/L	College Biology II/Cellular Bio/Lab	4
BIOL	201/L	Botany/Lab OR	
BIOL	202/L	Zoology/Lab	4
BIOL	350	Mendelian & Population Genetics	2
BIOL	351	Molecular Biology and Genetics	2
BIOL	206/L	Intro to Microbiology/Lab OR	
BIOL	301/L	General Microbiology/Lab	4-5
BIOL	223/L	Human Physiology & Anatomy I/Lab OR	
BIOL	224/L	Human Physiology & Anatomy II/Lab OR	
BIOL	414/L	Vertebrate Physiology/Lab	4
BIOL	352	Evolutionary Biology and Ecology	3
BIOL	378	Laboratory in Teaching Biology	1
Biology		Upper Division Field Elective/Lab	3-4
Approved Biology Upper Division Elective/Lab			3
BIOL	493	Seminar	1
CHEM	121/L	General Chemistry I/Lab	5
CHEM	122/L	General Chemistry II/Lab	5
CHEM	211/L	Intro to Organic Chemistry/Lab OR	
CHEM	301/L	Organic Chemistry I/Lab	4-5
GEOL	101/L	Earth Science/Lab	4
MATH	221	Applied Calculus: An Intuitive Approach	4
PHYS	201/L	Principles of Physics I/Lab	4
PHYS	202/L	Principles of Physics II/Lab	4

TOTAL   65-68

Education Minor 34

Institutional and General Education to
include the following courses: 24

PSYCH	151	Human Development
		OR
PSYCH	251	Childhood and Adolescence
SPCOM	103	Speaking and Listening
		(grade of B or better required)

Total credit hours 123-126

- *Elementary Teaching*

See Liberal Studies with Science Emphasis

Institutional and General Education

Please refer to the General Education Requirements in the *Academic Policies* section of this catalog or refer to your individual department's curriculum sheet.

Specific Requirements for the Professional Biology Minor

Courses		Titles	Credits
BIOL	181/L	College Biology I/Organismal Bio/Lab	4
BIOL	182/L	College Biology II/Cellular Bio/Lab	4
Approved Biology Electives			2
Approved Upper-division Electives			10
		TOTAL	20

Specific Requirements for the General Biology Minor

	Credits
Approved Lower-division Electives	12
Approved Upper-division Electives	8
TOTAL	20

Experiential Opportunities

There are many opportunities to participate in experiences that will complement and reinforce a student's academic experience. The activities may be either on- or off-campus and may be used to develop leadership and interpersonal skills. The faculty of the biology department actively encourages student participation in such activities.

MASTERS DEGREE IN CHEMISTRY 3+2 PLAN (BSMS)

A feature of the Chemistry MS program is the 3+2 plan. This plan gives qualified undergraduate students the opportunity to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on individual student's abilities and motivation.

Students in the 3+2 program are expected to successfully complete the requirements for both the BS and MS degree in five academic years. This is shorter than the typical six years that are necessary to complete BS and MS programs independently. Students must apply to the 3+2 program during the Spring semester of their junior year or the Fall semester of their senior year and meet the course requirements listed below. Students applying to the 3+2 program must have a minimum 3.0 overall GPA and a minimum 3.25 GPA in their chemistry courses.

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

1. A completed Chemistry MS application form;

2. A CSU-Pueblo Transcript;

3. Two letters of recommendation from CSU-Pueblo faculty; and

4. Combined GRE scores above 1000 (students may be admitted into the 3+2 program before taking the GRE; however, they must submit satisfactory GRE scores by the last day of finals at the end of their first semester in the 3+2 Chemistry MS program to remain in the program).

Prior to being admitted to the Chemistry MS 3+2 plan, students must have completed or be in the process of taking the following courses:

Courses		Titles
CHEM	121/L	General Chemistry I + Lab
CHEM	122/L	General Chemistry II + Lab
CHEM	301/L	Organic Chemistry I + Lab
CHEM	302/L	Organic Chemistry II + Lab
CHEM	221/L	Inorganic Chemistry + Lab
		OR
CHEM	421	Advanced Inorganic Chemistry
PHYS	221/L	General Physics I + Lab
PHYS	222/L	General Physics II + Lab
MATH	224	Calculus & Analytical Geometry II

All other requirements, including core courses, for the 3+2 plan are the same as for the regular Chemistry MS program plan. Dual-listed courses taken by the 3+2 plan

students as 400 level courses may be acceptable as electives to meet the minimum program course load requirements with the permission of the specific course instructor and Chemistry MS Program Director. It is expected that students take any 400/500 level courses at the 500 level once they are enrolled in the 3+2 program plan. Students admitted under the 3+2 plan may chose either the thesis or non-thesis (internship) program option.

Additional information about the Chemistry MS program and its requirements is found in the Graduate Programs in Natural Sciences section listed in the *Graduate Programs* section of the catalog.

MASTERS DEGREE IN BIOCHEMISTRY 3+2 PLAN (BSMS)

A feature of the Biochemistry MS program is the 3+2 plan. This plan gives qualified undergraduate students the opportunity to simultaneously pursue both the Baccalaureate (BS) and Master of Science (MS) degrees. Talented students are thus quickly moved toward expanding their academic and scientific horizons based on individual student's abilities and motivation.

Students in the 3+2 program are expected to successfully complete the requirements for both the BS and MS degree in five academic years. This is shorter than the typical six years that are necessary to complete BS and MS programs independently. Students must apply to the 3+2 program during the Spring semester of their junior year or the Fall semester of their senior year and meet the course requirements listed below. Students applying to the 3+2 program must have a minimum 3.0 overall GPA and a minimum 3.25 GPA in their chemistry and biology courses.

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

1. A completed Biochemistry MS application form;

2. A CSU-Pueblo Transcript;

3. Two letters of recommendation from CSU-Pueblo faculty; and

4. Combined GRE scores above 1000 (students may be admitted into the 3+2 program before taking the GRE; however, they must submit satisfactory GRE scores by the last day of finals at the end of their first semester in the 3+2 Biochemistry MS program to remain in the program).

Prior to being admitted to the Biochemistry MS 3+2 plan, students must have completed or be in the process of taking the following courses:

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
BIOL	301/L	General Microbiology + Lab
BOL	351	Molecular Biology and Genetics
MATH	224	Calculus & Analytical Geometry II
		OR
MATH	156	Introduction to Statistics
		AND
PHYS	202/L	Principles of Physics II + Lab
		OR
PHYS	222/L	General Physics II + Lab

All other requirements, including core courses, for the 3+2 plan are the same as for the regular Biochemistry MS program plan. Dual-listed courses taken by the 3+2 plan students as 400 level courses may be acceptable as electives to meet the minimum program course load requirements with the permission of the specific course instructor and Biochemistry MS Program Director. It is expected that students take any 400/500 level courses at the 500 level once they are enrolled in the 3+2 program plan.

Additional information about the Biochemistry MS program and its requirements is found in the Graduate Programs in Natural Sciences section listed in the Graduate Programs in Natural Sciences section listed in the *Graduate Programs* section of the catalog.

CHEMISTRY DEPARTMENT

Department Chair: David Lehmpuhl

Faculty: Bonetti, Dillon, Druelinger, Farrer, Kinney, Proctor

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, pre-medicine, 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

Chemistry graduates are expected to:

- Understand the concept of and be able to apply the scientific method to problem solution;

- Understand classifications of chemical compounds, general reaction types and quantitative aspects of stoichiometry as applied to chemical reactions;

- Apply basic knowledge of related fields such as mathematics and physics to problem solving, methods of analysis and use of numerical data in the chemical sciences;

- Demonstrate a knowledge of basic laboratory skills, methods and equipment used in chemistry for observation and analysis of chemical systems;

- Read, think and write critically and review current literature in the chemical sciences; and

- Exhibit a comprehensive knowledge of the fundamental theories, concepts and skills necessary in the chemical sciences.

General Requirements

- Students majoring or minoring in chemistry are required to have a cumulative GPA of 2.000 or better in their chemistry courses. In addition, students majoring or minoring in chemistry must receive a grade of "C" or better in all core chemistry courses.

- Proficiency in physics, math and computer science is essential for understanding and applying chemical principles; therefore, graduates must complete approved math and physics courses with an overall GPA of 2.000 or better.

- The ability to think across disciplines contributes significantly to the educational experience as well as the application of chemistry as a profession; therefore, graduates must successfully complete an approved minor or area of concentration such that the designated minor or area of concentration GPA is 2.000 or better.

- Transfer students are required to earn a minimum of 20 semester credit hours in approved chemistry courses from CSU-Pueblo for graduation with a BS degree in chemistry. Transfer students wishing to minor in chemistry must earn a minimum of 10 of the 20 credit hours required at CSU-Pueblo.

- Students will be required to successfully complete American Chemical Society exams in general

chemistry, organic chemistry, analytical chemistry, physical chemistry and instrumental methods during the course of the chemistry degree curriculum.

- Students will be required to take an exit examination during the senior year, covering the undergraduate chemistry curriculum. An exit interview is also required.

Specific Requirements

The following common core is required for all of the chemistry emphasis areas for the Bachelor of Science Degree:

CHEM Courses	Titles	Credits
CHEM 121/L	General Chemistry I/Lab	5
CHEM 122/L	General Chemistry II/Lab	5
CHEM 221/L	Inorganic Chemistry/Lab	3
CHEM 301/L	Organic Chemistry I/Lab	5
CHEM 302/L	Organic Chemistry II/Lab	5
CHEM 317/L	Quantitative Analysis/Lab	5
CHEM 321*	Physical Chemistry I	3
CHEM 322*	Physical Chemistry II	3
CHEM 419/L	Instrumental Analysis/Lab	5
CHEM 493	Seminar	1
	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	Titles	Credits
Required Chemistry Core		40
CHEM 323	Experimental Physical Chemistry	2
Approved Elective (CHEM or MATH 156)		3
	TOTAL	45

Other Required Courses

Courses	Titles	Credits
MATH 126	Calculus & Analytic Geometry I	5
MATH 224	Calculus & Analytic Geometry II	5

PHYS 221/L	General Physics I/Lab	5
PHYS 222/L	General Physics II/Lab	5
	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
	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	5
Approved CHEM Elective		3
(CHEM 492 or 495 strongly suggested)		
	TOTAL	51

Other Required Courses

Courses		Titles	Credits
BIOL	181/L	College Biology I/Organismal Bio/Lab	4
BIOL	182/L	College Biology II/Cellular Bio/Lab	4
BIOL	301/L	General Microbiology/Lab	5
BIOL	350	Mendelian and Population Genetics	2
BIOL	351/L	Molecular Biology and Genetics/Lab	4
BIOL	412/L	Cellular Biology/Lab	4
MATH	126	Calculus & Analytic Geometry I	5
MATH	224	Calculus & Analytic Geometry II	5
PHYS	221/L	General Physics I/Lab	5
PHYS	222/L	General Physics II/Lab	5

TOTAL   43

Institutional and General Education 24
Free Electives 2

Total credit hours..120

- *Double Major Emphasis*

Required Chemistry Core 40
(Including *either* major seminar course)

TOTAL   40

Other Required 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	4
		OR	
PHYS	221/L	General Physics I/Lab	5
PHYS	202/L	Principles of Physics II/Lab	4
		OR	
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 hours...121-123

- *Secondary Teaching Certification Emphasis*

Required Chemistry Courses

Courses		Titles	Credits
CHEM	121/L	General Chemistry I/Lab	5
CHEM	122/L	General Chemistry II/Lab	5

CHEM	211/L	Intro to Organic Chemistry/Lab	4
		OR	
CHEM	301/L	Organic Chemistry I/Lab	5
CHEM	311	Survey of Biochemistry	3
CHEM	317/L	Quantitative Analysis/Lab	5
CHEM	321	Physical Chemistry I	3
CHEM	419/L	Instrumental Analysis/Lab	5
		OR	
CHEM	221/L	Inorganic Chemistry/Lab	3
CHEM	493	Seminar	1

TOTAL   29-32

Other Required Courses

Courses		Titles	Credits
BIOL	100/L	Principles of Biology /Lab	4
BIOL	121/L	Environmental Conservation/Lab	4
GEOL	101/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	Human Development	3
		OR	
PSYCH	251	Childhood and Adolescence	3
		OR	
PSYCH	342	Educational Psychology	3
ED	202	Foundation of Education	3
ED	280	Educational Media &Technology	3
ED	301	Frameworks of Teaching	3
ED	412	Teaching Diverse Learners	3
ED	444	Teaching Secondary Science	4
RDG	435	Content Area Literacy	4
ED	485	Capstone Seminar in Education	2
ED	488	Student Teaching Secondary	
		OR	
ED	489	Student Teaching K-12	12

TOTAL   69

General Education 24
Free Electives 3

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	220	Drugs and Behavior	3
PSYCH	491*	Forensic Psychology (taught under Special Topics)	3
PSYCH	362*	Abnormal Psychology	3
ANTHR/SOC	416	Crime and the Mind	3
ANTHR/SOC	451	Culture/Deviance/Psychopathology	3
SOC	415	Forensic Criminology	3
SOC	417	Forensics & Homicide Investigations	3
BIOL	223/L	Human Physiology & Anatomy I/Lab	4
BIOL	301*	General Microbiology	3
BIOL	351*	Molecular Biology & Genetics	2
BIOL	351L*	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 Activities

- Assessment of chemistry majors occurs through examination of GPA in required courses. Majors are required to maintain a 2.000 GPA in major and minor courses as well as in other required courses.

- Students are required to complete American Chemical Society national standard exams when given during the course of the chemistry degree curriculum. Scores are compared to national averages to determine if students exhibit a comprehensive knowledge of the fundamental theories and concepts necessary in the chemical sciences disciplinary areas.

- Students are required to take an exit examination during the senior year. The ETS Major Field Examination covers the undergraduate chemistry curriculum. Scores are compared to national averages to determine if students exhibit a comprehensive knowledge of the fundamental theories and concepts necessary in the chemical sciences overall.

MATHEMATICS AND PHYSICS DEPARTMENT

Department Chair: Frank Zizza

MATHEMATICS PROGRAM

Faculty: Barnett, Chacon, Funk-Neubauer, Kreminski, Louisell, Lundberg, Melnykov, Nichols, Poritz, Zizza

The program's mission is to foster students' development in quantitative and analytical reasoning skills, powerful

mathematical problem-solving strategies, effective techniques for the communication of results and the capacity for lifelong independent learning. The major in mathematics leads to either a Bachelor of Arts (BA) or a Bachelor of Science (BS) degree. The program's flexible curriculum prepares students for diverse professional careers and for graduate studies. Faculty advisors work directly with majors and minors to design individual programs of study. Students who are potential majors or minors should consult with a faculty advisor as early as possible. Appointments with a faculty advisor can be made anytime by calling the department office.

Program Goals

- Educate students to effectively use quantitative and analytical methods and the language of mathematics.

- Prepare students for professional careers and graduate studies in areas requiring advanced analytical skills, including actuarial science, computer science, engineering, operations research, biomathematics, cryptography, finance, pure and applied mathematics and teaching.

- Promote a scholarly attitude of mind that enables students to effectively use mathematics with the ability to think critically, synthesize their knowledge and move to higher levels of independent thinking.

Expected Student Outcomes

Upon successful completion of the mathematics major, students will:

- Learn, understand and apply mathematics from the core mathematical disciplines of calculus, abstract algebra, analysis, modeling, differential equations, geometry, probability, and statistics.

- Formulate and solve problems using mathematical tools, while working alone or in groups on routine problems, non-routine and open-ended problems, problems involving applications to other fields, problems involving real-world data, and abstract problems within mathematics.

- Create, analyze and apply mathematical abstraction to real problems by understanding and producing formal mathematical arguments with an appreciation for the mathematical standards of rigor, elegance, and beauty.

- Learn independently, locate and use appropriate sources of technical material, and make use of modern computational tools.

- Produce convincing, precise verbal and written communications of technical material.

General Requirements

- All mathematics majors must complete the mathematics core curriculum: MATH 126, 207, 224, 307, 325, 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 two-semester 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

MATH Courses	Titles	Credits
MATH 126	Calculus & Analytic Geometry I	5
MATH 207	Matrix & Vector Algebra with Applications	2
MATH 224	Calculus & Analytic Geometry II	5
MATH 307	Intro to Linear Algebra	4
MATH 325	Intermediate Calculus	3
MATH 327	Abstract Algebra	4
MATH 337	Differential Equations I	3
MATH 350	Probability	3
MATH 421	Advanced Calculus I	4
Upper-division MATH Electives		6
(Excluding MATH 360, 361, 477)		

TOTAL   39

Other Requirements

Laboratory Science Sequence 10
Computer Programming 4

TOTAL   14

General Education credits 24
Electives 43

Total credit hours 120

Specific Requirements for the Mathematics Major/ Secondary Certification

MATH Courses		Titles	Credits
MATH	126	Calculus & Analytic Geometry I	5
MATH	207	Matrix & Vector Algebra with Applications	2
MATH	224	Calculus & Analytic Geometry II	5
MATH	307	Intro to Linear Algebra	4
MATH	325	Intermediate Calculus	3
MATH	327	Abstract Algebra	4
MATH	330	Intro to Higher Geometry	3
MATH	350	Probability	3
MATH	356	Statistics for Engineers & Scientists	3
MATH	419	Number Theory	3
MATH	421	Advanced Calculus I	4
MATH	463	History of Mathematics	3
MATH	477	Materials & Techniques of Teaching Secondary School Math	4

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	Human Development OR	3
PSYCH	251	Childhood and Adolescence OR	3
PSYCH	342	Educational Psychology	3
RDG	435	Content Area Literacy	4

TOTAL   33

Laboratory Science Sequence 10
Computer Programming 4
Electives 6

TOTAL   20

General Education 21

Total credit hours 120

Specific Requirements for the Minor in Mathematics

Courses		Titles	Credits
MATH	126	Calculus & Analytic Geometry I	5
MATH	224	Calculus & Analytic Geometry II	5
Electives including three upper-division courses* (Excluding MATH 360, 361, 362 & 477)			10

TOTAL   20

* Two of these must be taken at CSU-Pueblo.

Specific Requirements for the Minor in Computational Mathematics

Courses		Titles	Credits
MATH	126	Calculus & Analytic Geometry I	5
MATH	207	Matrix & Vector Algebra with Applications	2
MATH	224	Calculus & Analytic Geometry II	5
MATH	307	Introduction to Linear Algebra OR	4
MATH	342	Introduction to Numerical Analysis	3
MATH	320	Introductory Discrete Mathematics	3
MATH	345	Algorithms & Data Structures	4

TOTAL   22-23

Requirements for the Computational Mathematics Minor specific to Math Majors

Math majors, in lieu of the first 12 hours above are required to take:

Courses		Titles	Credits
An approved programming elective			3
CIS	171	Intro to Java Programming	4
MATH	242	Intro to Computation with MATLAB	4

TOTAL   11

Specific Requirements for the Math/Physics Double Major

MATH Courses		Titles	Credits
MATH	126	Calculus & Analytic Geometry I	5
MATH	207	Matrix & Vector Algebra with Applications	2
MATH	224	Calculus & Analytic Geometry II	5
MATH	307	Intro to Linear Algebra	4

MATH	325	Intermediate Calculus 3
MATH	327	Abstract Algebra 4
MATH	337	Differential Equations I..........................3
MATH	338	Differential Equations II........................3
MATH	350	Probability
		AND
MATH	356	Stats for Engineers & Scientists 6
		OR
MATH	550	Statistical Methods...............................3
MATH	421	Advanced Calculus I.............................4

TOTAL   36-39

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	323/L	General Physics III/Lab......................5
PHYS	321/322	Thermodynamics/Lab 4
PHYS	431/432	Electricity and Magnetism/Lab 5
PHYS	441	Quantum Mechanics 4
PHYS	480	Practicum in Lab Instruction................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

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

- Think critically and logically and use the scientific method in their future investigations.

- Understand and apply knowledge of various subfields of physics at the undergraduate level and make a successful transition to technical fields, including engineering, teaching, business, and graduate studies.

- Effectively communicate their results orally and in writing.

- Learn independently, locate and use appropriate sources of technical material and make use of modern scientific and computational tools.

General Requirements

- Students graduating with a BS in physics must have at least a 2.000 grade-point average in physics courses and no more than four credits in physics with grades of D.

- Students graduating with a minor in physics must have at least a 2.000 grade-point average in physics.

- A 2.500 grade-point average in the major area is required for admission to the teacher education program.

- At least 12 physics credits applied to the major (seven for minor) must be earned at CSU-Pueblo with a C or better average.

- Students must have earned a C or better grade in lower-division prerequisite courses before being admitted to upper-division courses in physics.

- In all but the teaching emphasis areas, students must demonstrate knowledge of computer programming.

- In all but the teaching emphasis areas, majors are required to take the senior research course, in which students become involved in a theoretical or experimental research problem relating to physics under the supervision of a department faculty member.

- A fundamental understanding of chemistry and its lab techniques is required of all majors.

Institutional and General Education

Please refer to the General Education Requirements in the *Academic Policies* section of this catalog or refer to your individual department's curriculum sheet.

Specific Requirements for the Physics Emphasis

PHYS Courses	Titles	Credits
PHYS 221/L	General Physics I/Lab	5
PHYS 222/L	General Physics II/Lab	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	4
		OR	
EN	103	Problem Solving for Engineers	3
MATH	126	Calculus & Analytic Geometry I	5
MATH	207	Matrix & Vector Algebra with Applications	2
MATH	224	Calculus & Analytic Geometry II	5
MATH	325	Intermediate Calculus	3
MATH	337	Differential Equations I	3
MATH	338	Differential Equations II	3
Approved Math Elective			3-4
		TOTAL	**37-39**

General Education..24
Electives..17-19

Total credit hours..120

Specific Requirements for the Engineering Emphasis

PHYS Courses		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	Materials Science & Engineering/Lab	4
EN	441/L	Engineering of Manufacturing Processes/Lab	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		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	341/342	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

Approved electives in chemistry....................................22

TOTAL 53-64

General Education...24
Electives...11-0

Total credit hours...120

*A MATH/PHYSICS double major is also available in the department. (See MATH department requirements.)

Specific Requirements for the Physics Secondary Certification Emphasis

PHYS Courses		Titles	Credits
PHYS	110	Astronomy	3
PHYS	140/L	Light, Energy and the Atom/Lab	4
PHYS	221/L	General Physics I/Lab	5
PHYS	222/L	General Physics II/Lab	5
PHYS	321/322	Thermodynamics/Lab	4
PHYS	323/L	General Physics III/Lab	5
PHYS	341/342	Optics/Adv. Laboratory-Optics	4
PHYS	480	Practicum in Lab Instruction	1

TOTAL   31

Other Required Courses

Courses		Titles	Credits
BIOL	100/L	Principles of Biology/Lab	4
BIOL	121/L	Environmental Conservation/Lab	4
CHEM	121/L	General Chemistry I/Lab	5
CHEM	122/L	General Chemistry II/Lab	5
ED	202	Foundation of Education	3
ED	280	Educational Media & Technology	3
ED	301	Frameworks of Teaching	3
ED	412	Teaching Diverse Learners	3
ED	444	Teaching Secondary Science	4
ED	485	Capstone Seminar in Education	2
ED	488	Student Teaching Secondary	12
GEOL	101/L	Earth Science/Lab	4
MATH	126	Calculus & Analytic Geometry I	5
MATH	224	Calculus & Analytic Geometry II	5
PSYCH	151	Human Development	3
		OR	
PSYCH	251	Childhood and Adolescence	3
		OR	
PSYCH	342	Educational Psychology	3
RDG	435	Content Area Literacy	4

TOTAL   69

General Education...21

Total credit hours...121

Specific Requirements for the Physical Science Secondary Certification Emphasis

PHYS Courses		Titles	Credits
PHYS	110	Astronomy	3
PHYS	140/L	Light, Energy and the Atom/Lab	4
PHYS	221/L	General Physics I/Lab	5
PHYS	222/L	General Physics II/Lab	5
PHYS	323/L	General Physics III/Lab	5

TOTAL   22

CHEM Courses		Titles	Credits
CHEM	121/L	General Chemistry I/Lab	5
CHEM	122/L	General Chemistry II/Lab	5
CHEM	211/L	Intro to Organic Chemistry/Lab	4
		OR	
CHEM	301/L	Organic Chemistry I/Lab	4
CHEM	317/L	Quantitative Analysis/Lab	5
CHEM	321	Physical Chemistry I	3
CHEM	378	Practicum in Lab Instruction	1

TOTAL   23

Other Required Courses

Courses		Titles	Credits
BIOL	100/L	Principles of Biology/Lab	4
BIOL	121/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	Human Development	3
		OR	
PSYCH	251	Childhood and Adolescence	3
		OR	
PSYCH	342	Educational Psychology	3
RDG	435	Content Area Literacy	4

TOTAL   62

General Education 21

Total credit hours...125

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 and Chemistry I	4
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

TOTAL   27

Co-Curricular Requirements

The program faculty believes that students should have co-curricular experiences that complement and reinforce their academic experiences. Therefore, the faculty encourages students to join and participate in events sponsored by the department and the Society of Physics Students (SPS), Sigma Pi Sigma initiations, physics expositions, picnics, graduation dinners, potluck dinners, etc. to foster a spirit of camaraderie.

Outcomes Assessment Activities

The Physics Program faculty will assess the skills, capacities, and knowledge of its majors as follows:

- The student must complete a senior research project including a formal presentation of results both in writing and orally to at least two members of the physics faculty (except for those in the teaching emphasis areas).

- The student must take the Physics Major Field Achievement Test offered by The Educational Testing Services (ETS) or another departmentally approved exam covering the sub-fields in physics at some point during his/her senior year (except for those in the teaching emphasis areas).

- By maintaining a portfolio for each student which contains college grades, records of special skills acquired, senior research project results, Field Achievement Test results and a record of co-curricular 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. Sue Hanks, Interim 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 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) **Problem Solving**

    Our students will be able to analyze problems and develop solutions.

3) **Global Awareness**

    Our students will be able to apply global business concepts.

4) **Ethical Awareness**

    Our students will be able to recommend ethical alternatives and appropriate actions.

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, nonprofit organizations or

government. The *accounting* major prepares graduates for professional careers in accounting. The knowledge and skills acquired in the *business management* major can be used in a number of areas including human resource and operations management. The *business management major with an emphasis in marketing* prepares the graduate to successfully promote and sell goods and services. The *CIS* major prepares graduates for successful careers in the computer information systems and information technology (IT) fields. *Economics* majors are particularly well prepared to enter graduate programs in business, in addition to assuming entry-level positions in business firms, nonprofit organizations or government, as well as, positions in banking, financial analysis, and related financial services industries.

NOTE: Students planning to take professional certification exams in any field are encouraged to consult with their faculty advisor to understand any additional requirements.

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, 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 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 for effective managerial oversight in nonprofit 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 business majors with general business knowledge and skills. The Core also provides students with an understanding of and appreciation for the intellectual discipline needed for successful completion of a business major.

These courses provide students with the common body of knowledge needed for imaginative and responsible citizenship and leadership roles in business and society, domestically and globally. The Business Core is designed to provide students with the opportunity to integrate their educational experiences in business within a specific discipline and across disciplines.

An overall GPA of 2.000 is required in General Education Skills Component courses. All business majors are required to earn a C or better in Business Core courses and in 300/400-level major courses. In addition, students should have completed the 100/200-level Business Core courses prior to enrolling in 300/400-level business courses. Additional prerequisites for Business Core courses and major courses are specified in the *Course Descriptions* section of the catalog. Business Core courses are listed alphabetically by prefix. Academic Planning Sheets are available in HSB.

Business Core

Courses		Titles	Credits
ACCTG	201	Financial Accounting	3
ACCTG	202	Managerial Accounting	3
BUSAD	101	Business Careers and Opportunities	1
BUSAD	265	Inferential Statistics and Problem Solving	3
BUSAD	270	Business Communications	3
BUSAD	302	Ethics in Business	3
BUSAD	360	Advanced Business Statistics	3
BUSAD	493	Senior Seminar	1
CIS	103	PowerPoint and Web Publishing	1
CIS	104	Excel Spreadsheets	1
CIS	105	MS Access	1
ECON	201	Principles of Macroeconomics	3
ECON	202	Principles of Microeconomics	3
FIN	330	Principles of Finance	3
MATH	220	Quantitative Analysis for Business	4
MGMT	201	Principles of Management	3
MGMT	301	Organizational Behavior	3
MGMT	311	Operations and Quality Management	3
MGMT	485	Strategic Management	3
MKTG	340	Principles of Marketing	3

TOTAL   51

Majors and Emphasis Areas
(Specific course requirements are detailed later.)

Select one:

Accounting 24
Business Management...24
Business Management/Information Technology 37
Business Management/Marketing 24
Economics..24

Business majors may take a second major in a business discipline that is **not related** to their first major discipline, provided that the additional 300/400-level credits associated with the second major are in addition to the credits needed to complete the first major (i.e., If the first major is 120 credits and the second major is 24 credits, then the total credits to complete the first major and the second major will be a minimum of 144). For example, a student earning the BSBA in business management could also major in accounting or economics.

Business majors may take a minor in a business discipline that is **not related** to their major discipline, provided that the additional 300/400-level credits associated with the minor are in addition to the credits needed to complete their major (i.e., If the major is 120 credits and the additional credits in the minor are 9 credits, then the total credits to complete the major and the minor will be a minimum of 129). For example, a student earning the BSBA in business management could also minor in accounting or economics.

Graduation Requirements for Business Majors (Accounting, Business Management, and Economics)

Students must satisfy the University general education requirements, the general institutional requirements, and have at least 120 total credit hours with a cumulative GPA of 2.000 to graduate.

An overall GPA of 2.000 is required in General Education Skills Component courses. All business majors are required to earn a C or better in Business Core courses and 300/400-level major courses.

Credit Policy

To earn a BSBA from CSU-Pueblo, students must complete no fewer than 30 semester hours in business at the 3/400 level in residence at CSU-Pueblo. Students who complete junior- and senior-level courses at other colleges or universities with grades of C- or better, and wish to apply the credits earned toward their degree, must request approval through the Dean or 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 School.

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
Business Core...*45
Major 24
Open Electives 15

TOTAL (minimum credits) 120

*ECON 201 and ECON 202 are counted in General Education.

Summary of Graduation Requirements (CIS):

General Education *36
Quantitative Analysis Requirement 10
Required Related 9
Open Electives 13
Major 52

TOTAL (minimum credits) 120

*Must include SPCOM 103 or equivalent; ECON 201 and 202, and MATH 121.

Co-Curricular Opportunities

Co-curricular activities are encouraged for all Hasan School of Business students. Included are internships, student clubs, and seminar programs. A current list of clubs is available in the Hasan School of Business or on the CSU-Pueblo web site.

Outcomes Assessment Activities

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, administered nationwide, assesses what students have learned in courses common to all business majors. Results are compared with those of other business students enrolled at selected peer institutions, as well as nationally. In the Hasan School of Business, the Major Field Test is given to students in the BUSAD 493 capstone course in their senior year.

- **Course-Embedded Measures**. Exams, papers, presentations, and projects include course-embedded measures that can be used to assess student performance.

The Hasan School of Business compiles information to assess the success of graduates. Information is obtained from the CSU-Pueblo Alumni Office, the Career Center, and other sources.

Advising

All pre-business, 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, Lin, Wink

The major in accounting leads to the Bachelor of Science in Business Administration (BSBA). The primary objective is to provide an academic program that covers the conceptual basis of accounting as well as the application of accounting doctrine in current accounting practice. The programs of study are functional in that they provide the broad base of knowledge required by the accounting profession.

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	3
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
			TOTAL 21

A GPA of 2.000 or higher is required for the minor.

BUSINESS MANAGEMENT MAJOR

Faculty: Ahmadian, Billington, Brennan, Fowler, Fronmueller, Gentry, Gilbreath, Hanks, Joo, 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

Courses		Titles	Credits
MGMT	318	Human Resource Management	3
MGMT	365	Management Information Systems	3
MGMT	475	International Management OR	
MKTG	475	International Marketing	3
MGMT	3/400	Electives	9
Business Electives (3/400-level)			6
		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	3
MGMT	475	International Management OR	
MKTG	475	International Marketing	3
CIS	150	Computer Information Systems	*3
CIS	171	Introduction to Java Programming	*4
CIS	185	PC Architecture	*3
CIS	240	Object Oriented Analysis and Design	*3
CIS	289	Network Concepts	*3
CIS	311	Introduction to Web Development	3
CIS	350	Data Base Systems	3
MGMT	3/400	Elective	3
Business/CIS		Elective (3/400-level)	3
		TOTAL	37

*CIS 150, 171, 185, 240, and 289 replace the 15 credits of open electives in the Business Management graduation requirements.

Additional Requirements

Courses	Credits
Open Electives	2
TOTAL	2

Requirements for the Business Management Major with Marketing Emphasis

Courses		Titles	Credits
MGMT	365	Management Information Systems	3
MKTG	441	Marketing Strategies	3
MKTG	3/400	Electives	12
Business Electives (3/400-level)			6
		TOTAL	24

Business Minors

Requirements for the Business Administration Minor (open to non-business majors only)

Courses		Titles	Credits
ACCTG	201	Financial Accounting	3
ACCTG	202	Managerial Accounting	3
ECON	201	Principles of Macroeconomics	3
ECON	202	Principles of Microeconomics	3
FIN	330	Principles of Finance	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
MKTG	3/400	Marketing Electives	9

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, Huff, Long, Martinez, San Nicolas-Rocca

The Bachelor of Science (BS) degree in Computer Information Systems (CIS) prepares graduates for successful careers in the computer information systems and information technology (IT) fields. Students complete a comprehensive, relevant, computer information systems curriculum that delivers high-demand knowledge, skills, and abilities in: software and web application development, system analysis and design, network design and administration, database design and development, operating systems, and IT security.

The CIS program also includes three options for gaining proficiency in the field of computer security. 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 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 Business-related 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: 3 credits of SPCOM 103 or equivalent

Social Science: ECON 201 and ECON 202

Mathematics: MATH 121

Quantitative Analysis Requirement

Courses		Titles	Credits
MATH	220	Quantitative Analysis for Business	4
BUSAD	265	Inferential Statistics and Problem Solving	3
BUSAD	360	Advanced Business Statistics	3

Required Related Courses

BUSAD	270	Business Communications	3
MGMT	201	Principles of Management	3
MGMT	368	Project Management	3

CIS Major Courses:

CIS Courses		Titles	Credits
CIS	100	Intro to Word & Windows	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

TOTAL 52

Students may select from the wide range of CIS electives listed below. By carefully selecting from the list, students may focus their CIS major in one of the following areas: computer security, software and web application development, systems analysis and design, database design and development, and network design and administration.

CIS Electives (must total 12 credits)

CIS Courses		Titles	Credits
CIS	356	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	3
CIS	315	Unix Operating Systems	3
CIS	360	IT Security	3
CIS	461	IT Security Management	3
CIS	462	Computer Forensics	3
CIS	401	Network Systems Administration OR	
CIS	402	Linux Networks and Routing	3

SUB-TOTAL 21

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	1
CIS	105	MS Access DBMS	1
CIS	150	Computer Information Systems	3
CIS	171	Introduction to Java Programming	4
CIS	240	Object Oriented Analysis and Design	3

SUB-TOTAL 14

Personal Computers/Local Area Network Support

CIS Courses		Titles	Credits
CIS		Minor Core	14
CIS	185	PC Architecture	3
CIS	289	Network Concepts	3
CIS	401	Network Systems Administration 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

CIS Courses		Titles	Credits
CIS		Minor Core	14
CIS	271	Adv. Program Design with Java	4
CIS	356	XML Programming	3
CIS	359	Advanced Programming with C#	3
		TOTAL	24

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. Certificates do not appear on the CSU-Pueblo transcript.

ECONOMICS MAJOR

Faculty: Duncan, Hassan, Regassa, Whited

The major in economics leads to the Bachelor of Science in Business Administration (BSBA) and provides students with the theoretical and conceptual basis of economics. Economics majors are particularly well prepared to enter graduate programs in business in addition to assuming entry-level positions in business firms, nonprofit organizations or government. The major in economics also prepares the graduate for positions in banking, financial analysis, and related financial services industries.

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	302	Intermediate Microeconomics	3
ECON	310	Money and Banking	3
ECON	475	International Economics OR	
FIN	475	International Finance	3
ECON/FIN	3/400	Electives	9
Business Electives (3/400-level)			6
		TOTAL	24

Requirements for the Economics Minor

Courses		Titles	Credits
ACCTG	201	Financial Accounting	3
ECON	201	Principles of Macroeconomics	3
ECON	202	Principles of Microeconomics	3
ECON	302	Intermediate Microeconomics	3
ECON	310	Money and Banking	3
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	Credits
ACCTG	510	Managerial Accounting	3
BUSAD	502	Business Ethics and Environment	3
BUSAD	575	International Business	3
ECON	510	Economics for Managers	3
FIN	530	Financial Management	3
MGMT	511	Production/Operations Management	3
MGMT	520	Management of Organizational Behavior	3
MGMT	565	Management Information Systems	3
MGMT	585	Management Policy & Strategy	3
MKTG	540	Marketing Management	3

In addition, the following MBA courses must be completed:

Courses	Credits
Approved Graduate Electives	6

TOTAL GRADUATE   36

In summary, the joint degree plan has the following requirements:

General Education	36
Skills	7
Open Electives	15
Business Core	*26
Business Major	24
MBA requirements	36

JOINT DEGREE TOTAL   144

*Econ 201 and ECON 202 are counted in General Education.

Students who complete part of the joint degree plan but decide to opt out of the MBA program and continue towards earning **only** the BSBA are granted credit towards the BSBA for 500-level courses taken as follows:

500-Level Course Taken		300- and 400-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
ACCTG, BUSAD, ECON, FIN, MGMT, MKTG			
	575		475

JOINT BS-CIS/MBA
(3 PLUS 2 Program)

Admission Requirements

The BS-CIS/MBA program is unique. It allows qualified students to earn both a BS degree in CIS and an MBA concurrently.

Students are required to take the Graduate Management Admissions Test (GMAT). An admission index formula of 200 times the undergraduate GPA (4.000 system) plus the GMAT score is used as an admission score. The undergraduate GPA must be based on a minimum of 90 semester hours of course work, including MGMT 201, FIN 330, and MKTG 340. Students must have a minimum GPA of 3.25 and a GMAT of at least 450 (i.e., an index of 1100) to be admitted to the program. Students who fail to meet these requirements may provide additional evidence of their ability to complete the program. Such evidence may include: performance in outside activities, evidence of creativity or leadership, and a record of accomplishment.

Prior to enrolling in the first 500-level course, students are expected to have completed a significant portion of the requirements for their undergraduate major and must have submitted an acceptable GMAT.

NOTE: Students are strongly encouraged to complete an internship prior to enrolling in graduate-level courses.

General Requirements

Students in the joint BS-CIS/MBA program must complete:

- The CIS required and required-related courses excluding CIS 350 and CIS 432;

- ACCTG 201, ECON 202, FIN 330 and MKTG 340;

- The CIS major within the Hasan School of Business; and

- All remaining specified MBA courses.

In addition, students must satisfy all GPA requirements for the BS in CIS and the MBA (see the MBA listing under the *Graduate Programs* section of the catalog).

MBA Required Courses

Courses		Titles	Credits
ACCTG	510	Managerial Accounting	3
BUSAD	502	Business Ethics and Environment	3
ECON	510	Economics for Managers	3
FIN	530	Financial Management	3
MGMT	511	Production/Operations Management	3
MGMT	520	Management of Organizational Behavior	3
MGMT	585	Management Policy & Strategy	3
MKTG	540	Marketing Management	3

In addition, the following CIS courses must be completed:

Courses		Titles	Credits
CIS	532	Senior Professional Project	6
CIS	550	Data Base Systems	3
CIS	581	IT Implementation OR	
CIS	582	IT Strategy	3

TOTAL GRADUATE   36

In summary, the joint degree plan has the following requirements:

General Education 36
Quantitative Analysis 10
Required-related Courses 9

Courses toward Business Administration Minor 13
CIS Required Courses 31
CIS Elective Courses 9
MBA Requirements 36

JOINT DEGREE TOTAL   144

Students who complete part of the joint degree plan but decide to opt out of the MBA program and continue toward earning **only** the BS in CIS are granted credit toward the BS for 500-level courses taken as follows:

500-Level 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   Courses for Nursing Post Masters Certification: Residency and Fellowship and Colorado State University (Fort Collins) courses offered at Colorado State University-Pueblo 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................................course prefix

127..................................course number

Functional Piano I: Beginning .. course title

1(0-2)...............................number of credits (clock hours in lecture per week – clock hours in laboratory demonstration or studio experiences per week)

"For students" ....explanation of course content

(F,S).................................taught fall, spring

Repeatable (2) ....course may be repeated and counted toward graduation for a maximum of 2 credits

Note: Not all of the above information may be noted in each course. Additional symbols include:

F   Taught fall semester

S   Taught spring semester

SS   Taught summer session

*   Offered upon demand

O   Taught odd numbered years

E   Taught even numbered years

VAR   Variable credit course

L   Suffix indicating lab course

IP   Grade of IP (In Progress) available

S/U   Grade of S or U available

UNIVERSITY-WIDE "HOUSE-NUMBERED" 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) and for Nursing Post Masters Certification: Residency and Fellowship

COURSE PREFIXES

Courses of instruction are identified by the following approved prefixes:

ACCTG	–	Accounting
AIM	–	Automotive Industry Management
ANTHR	–	Anthropology
ART	–	Art
AT		Athletic Training
BBE	–	Bilingual Bicultural Education
BIOL	–	Biology
BUSAD	–	Business Administration
CET	–	Civil Engineering Technology
CHEM	–	Chemistry
CIS	–	Computer Information Systems
CM	–	Construction Management
CS	–	Chicano Studies
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 cost-based, 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 491 Special Topics (1-3 VAR)
 (*) Repeatable (6)

ACCTG 495 Independent Study (1-3 VAR)
Prerequisite: senior standing, accounting major and adviser permission. (*) Repeatable (6)

ACCTG 498 Internship (1-6 VAR)
Supervised field work in selected business, social and governmental organizations; supplemented by written reports. (S/U grading.) Prerequisite: junior or senior standing in School of Business and permission of internship coordinator. (*) Repeatable (6)

GRADUATE COURSES

ACCTG 501 Fundamentals of Accounting 1.5(1.5-0)
This class, as an MBA leveling course, provides a basic understanding of financial reporting accounting, including the accounting cycle, financial statement preparation, and internal controls. Prerequisite: admission to MBA. (*)

ACCTG 505 Principles of Financial Accounting 3(3-0)
Introduction to accounting as the language of business. Emphasis on reasoning and logic of external reporting model. May include computer-based applications. (*)

ACCTG 510 Managerial Accounting 3(3-0)
Accounting concepts and methods utilized in managerial planning, budgeting, controlling, and evaluating to optimize decision making. Prerequisite: admission to MBA or permission of MBA Director. (*)

ACCTG 511 Tax Planning and Research 3(3-0)
Advanced study of tax research methodology, IRS and professional guidelines on tax positions, appreciation of research skills, planning techniques to individual, corporate, partnership cases. Prerequisite: ACCTG 311. (*)

ACCTG 520 Advanced Cost Management Systems 3(3-0)
Cost systems supporting new management philosophies–JIT, total quality management, continuous improvement, process reengineering. Activity-based costing, target costs, cost of quality. Prerequisite: ACCTG 320 and admission to MBA or permission of MBA Director. (*)

ACCTG 591 Special Topics 3(3-0)
Critical review and discussion of relevant accounting topics. (*) Repeatable (6)

ACCTG 595 Independent Study (1-3 VAR)
Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

AUTOMOTIVE INDUSTRY MANAGEMENT (AIM)

UNDERGRADUATE COURSES

AIM 105 Introduction to the Parts and Service Industry 1(1-0)
Introduction to the industry from viewpoint of history, social impact, organization structure, manpower needs, and future growth. (F)

AIM 115 Automotive Engine Design, Operation and Repair 5(3-4)
Design, operation and repair techniques of current and future automotive engines. (F)

AIM 125 Automotive Suspension and Brake Systems 3(3-0)
Design and theory of front and rear automotive suspensions, steering, and brake systems. (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)
Corequisite: AIM 165. (S)

AIM 235 Automotive Fuel Systems and Exhaust Emissions 3(3-0)
Design and theory of automotive fuel systems, fuel injection, and supercharging; functions and design of automotive emissions systems. Prerequisite: AIM 115 and AIM 245 or permission of instructor. Corequisite: AIM 235L. (S)

AIM 235L Automotive Fuel Systems and Exhaust Emissions Systems Lab 1(0-2)
Corequisite: AIM 235. (S)

AIM 245 Automotive Electrical Systems I 3(3-0)
Design and theory of operation of automotive electrical circuits; ignition, starting, charging, and accessory circuits, with study of diagnostic equipment used to diagnose system malfunctions. (F)

AIM 245L Automotive Electrical Systems Laboratory I 1(0-2)
Corequisite: AIM 245. (F)

AIM 255 Automotive Electrical Systems II 3(3-0)
Design and operational theory of solid state ignitions systems and computer-controlled systems including engine, braking, transmission, emission, and comfort systems. Prerequisite: AIM 245/245L. Corequisite: AIM 255L. (S)

AIM 255L Automotive Electrical Systems II Lab 1(0-2)
Corequisite: AIM 255. (S)

AIM 265 Automotive Parts Management Systems 4(3-2)
A study of automotive parts service management software systems utilized by industry in distribution, inventory, basic procedures. (S)

AIM 296 Cooperative Education Placement (1-5 VAR)
Supervised industrial field work. Prerequisite: freshman or sophomore standing, AIM major. (F,S)

AIM 305 Auto Customer Service Regulatory Issues 3(3-0)
A study of automotive industry management theory, styles, equipment, communications and regulatory issues. Prerequisite: junior or senior standing. (F)

AIM 325 Fuels and Lubricant Production, Marketing and Conservation 3(3-0)
Petroleum industry; basic production processes, marketing techniques, alternate fuel sources, and conservation techniques. Prerequisite: junior or senior standing. (F)

AIM 335 Automotive Shop Practices 5(2-6)
Diagnosis of electrical, fuel, engine, brake and transmission systems; study of service management and service writer duties. Prerequisite: AIM 125/125L, 165/165L, 235/235L, 255/255L and junior or senior standing. (S)

AIM 345 Advanced Automotive Systems 5(3-4)
Theory and lab experience on new concepts in automotive electrical, fuel and suspension systems. Prerequisite: AIM 125/125L, 165/165L, 235/235L, 255/255L and junior or senior standing. (F)

AIM 405 Personal Selling Methods and Techniques 4(3-2)
Research, preparation and presentation methods and techniques for selling in the automotive milieu. Prerequisite: junior or senior standing. (F)

AIM 425 Automotive Financial Management 5(4-2)
A study of financial management and analysis used by automotive aftermarket and original equipment businesses. Prerequisite: AIM 265, ACCTG 202 and junior or senior standing. (S)

AIM 490 Special Projects (1-5 VAR)
Individualized instruction within a special interest area, under the supervision of a department faculty member. Prerequisite: Junior or Senior standing and permission of instructor. (*) Repeatable (10)

AIM 491 Special Topics (1-5 VAR)
Prerequisite: permission of instructor. (F,S) Repeatable (10)

AIM 495 Independent Study (1-4 VAR)
Directed, independent study of topics agreed upon by the student and instructor. Prerequisite: AIM majors, junior standing, permission of instructor and department chair. (F,S,SS) Repeatable (10)

AIM 496 Cooperative Education Placement (1-5 VAR)
Supervised industrial field work. Prerequisite: junior or senior standing, AIM major. (F,S) Repeatable (10)

ANTHROPOLOGY (ANTHR)

UNDERGRADUATE COURSES

ANTHR 100 Cultural Anthropology 3(3-0)
Introduction to the concepts by which anthropology understands particular lifestyles, and to the constructs by which it accounts for similarities and differences among lifestyles. (*)

ANTHR 104 Human Origins 3(3-0)
Biological nature of humans; emphasis on how forces of evolution have shaped human nature. (*)

ANTHR 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 141 Drawing I 3(1-4)
Development of perception and technical skills in rendering. (F,S)

ART 211 History of Art I 3(3-0)
A survey of world art from prehistory to ca. 1300 CE. Introduces issues related to visual design, historical context, and interpretation of works of art. (F,*)

ART 212 History of Art II 3(3-0)
A survey of world art from ca. 1300 CE to contemporary times. Introduces issues related to visual design, historical context and interpretation of works of art. (S,*)

ART 233 Sculpture I 3(0-6)
Basic problems in sculpture relating specific concerns of visual form and process. Prerequisite: ART 116 or permission of instructor. (F,S)

ART 234 Painting I 3(1-4)
Introduction to painting in oil and acrylic where the control of space will be approached through the use of color. Prerequisite: Art core. (F,S,SS)

ART 242 Drawing II 3(1-4)
Continued development of perception and technical skills in rendering, utilizing the human figure. Detail investigation of the skeleton and muscle forms are explored. Prerequisite: ART 141. (F,SS)

ART 247 Ceramics I 3(0-6)
Essential skills in ceramic processes; emphasis on form and function as related to students' needs and creative intent. (F,S,SS)

ART 270 Printmaking I 3(0-6)
Introduction to multiple image production through traditional and non-traditional methods, including woodcut, linocut, and intaglio. Shop techniques, history and safety are also covered. Prerequisite: Art core or permission of instructor. (F,S)

ART 274 Digital Art I 3(1-4)
This course is an introduction to two-dimensional Digital Art. The student will learn to create original imagery through the use of art-oriented software. (F,S)

ART 276 Photography I 3(1-4)
Photography as an art form and as an adjunct to other art media. Prerequisite: Art core or permission of instructor. (F,S)

ART 281 Graphic Design I 3(1-4)
A basic treatment of graphic processes and techniques related to advertising design and visual communication. Prerequisite: Art core or permission of instructor. (S)

ART 291 Special Topics (1-5 VAR)
(F,S,SS) Repeatable

ART 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 233 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 3(0-6)
Investigation into multiple image production through traditional and non-traditional methods emphasizing lithography, photo processes and computer imagery. Special attention given to student's interest area. Prerequisite: ART 270. (F,S)

ART 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. (*)

ART 374 Digital Art II 3(1-4)
Introduction to time-based Digital Art. The student will learn the creative potential of the art of the moving image through digital video oriented software. Prerequisite: ART 274. (S)

ART 376 Photography II 3(1-4)
Photography as an art form and an adjunct to other art media. Prerequisite: ART 276. (F)

ART 381 Graphic Design II 3(1-4)
Intermediate graphic design techniques including typography, pre-press and client relations. Prerequisite: ART 281 or permission of instructor. (F)

ART 382 Illustration 2(0-4)
Images rendered in varying techniques to express ideas related to commercial application. Prerequisite: ART 381 or permission of instructor. (F,S,SS)

ART 383 Exhibition Design 2(0-4)
Communication and design principles applied to the display of objects. Special attention to museum and gallery installations. Prerequisite: permission of instructor. (F,S,SS)

ART 397 Studio Series (1-3 VAR)
Advanced studio offerings for students who have completed all other course offerings in a specific discipline. Scheduled concurrently with lower-division studios. Prerequisite: permission of instructor. (F,S,SS) Repeatable (9)

ART 410 Senior Career Orientation 1(1-0)
Formal presentation of student's 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 411. (*)

ART 413 Native American Art 3(3-0)
A study of art and visual design in Native North American cultures from prehistory to contemporary times. Prerequisite: ART 212. (*)

ART 414 Asian Art 3(3-0)
A survey of art from major cultures of Asia and the Far East from ancient to contemporary times. Prerequisite: ART 211. (*)

ART 415 Latin American Art 3(3-0)
A survey of art of Latin America from ancient to the contemporary times. Includes Chicano art. Prerequisite: ART 212. (*)

ART 433 Advanced Site Art 3(0-6)
Advanced projects in Site Art that involve the presentation and creation of site specific sculptural forms. Prerequisite: ART 333 or permission of instructor. (F,S) Repeatable (9)

ART 434 Painting III 3(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. Prerequisite: ART 347 or permission of instructor. (F,S,SS) Repeatable (9)

ART 470 Printmaking III 3(0-6)
Advanced investigation into multiple image production through individual techniques and interest. Prerequisite: ART 370. (F,S) Repeatable (9)

ART 474 Digital Art III 3(1-4)
In this course the student will learn to further develop the potential of Digital Art through the exploration of internet art, video and sound art. Prerequisite: ART 374. (S)

ART 476 Photography III 3(1-4)
Students are encouraged to pursue specific areas of interest, and advance their personal imagery while continuing study of postmodern themes in contemporary photography. Prerequisite: ART 376. (F)

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,SS)

ART 496 Cooperative Education Placement (1-4 VAR)
Prerequisite: permission of instructor. (F,S,SS)

ART 497 Studio Series (1-3 VAR)
Advanced sections of studio offerings. Prerequisite: ART 397 or permission of instructor. (F,S,SS) Repeatable

GRADUATE COURSES

ART 500 Workshop (1-5 VAR)
Using materials and techniques based on advanced concepts and ideas. Prerequisite: permission of instructor and graduate standing. (F,S,SS) Repeatable

ART 511 Twentieth-Century Art (1-3 VAR)
Graduate study of artists, their biographies and art, politics and culture, from the middle of the nineteenth through the end of the twentieth century. Prerequisite: permission of instructor. (F,S,SS) Repeatable

ART 512 Contemporary Art 3(3-0)
Advanced study in contemporary art and associated criticism, aesthetics and the philosophy of art through the end of the twentieth century. Prerequisite: ART 212 or permission of instructor. (*)

ART 533 Graduate Level Sculpture/Public Art 3(0-6)
Graduate level work in sculpture/public art including explorations in content, context, critique and techniques. Prerequisite: three semesters of undergraduate sculpture or permission of instructor. (F,S) Repeatable

ART 542 Graduate Drawing 3(1-4)
Professional drawing practices utilizing quality papers and display presentation. Prerequisite: ART 412. (*)

ART 547 Ceramics (1-3 VAR)
Graduate level work in clay including explorations in ceramic content, context, critique and techniques (forming, firing and glazing). Prerequisite: three semesters of undergraduate ceramics or permission of instructor. (F,S,SS) Repeatable

ART 570 Graduate Printmaking 3(0-6)
Graduate students will develop their personal, creative approach to image making through innovative exploration of relief, intaglio or lithography. Prerequisite: ART 470. (*)

ART 591 Special Topics (1-3 VAR)
Prerequisite: permission of instructor and graduate standing. (F,S,SS) Repeatable

ART 597 Studio Series (1-3 VAR)
Graduate level studies. Prerequisite: permission of instructor. (F,S,SS) Repeatable

ATHLETIC TRAINING (AT)

UNDERGRADUATE COURSES

AT 101 Introduction to Athletic Training 2(2-0)
Introduction to the profession and overview of the fundamentals of athletic training. (F,S)

AT 231 CPR/AED for the Professional Rescuer 1(1-1)
CPR/AED training for the Professional Rescuer. Also, covers other emergency care skills used by athletic trainers. Prerequisite: Athletic Training Majors. (F,S,SS)

AT 232 First Aid 2(1-1)
Knowledge and skills in current first-aid and CPR procedures for the Lay Responder. Red Cross certification. (F,S,SS)

AT 260 Care and Prevention of Athletic Injuries 3(2-2)
Procedures in the prevention, care and treatment of injuries sustained during activity and athletic participation. (F,S)

AT 279 Practicum in Athletic Training I 2(0-4)
Instruction, practice and evaluation of assigned NATA psychomotor competencies and clinical proficiencies. Prerequisite: AT 232 and AT 260. (F,S)

AT 291 Special Topics (1-5 VAR) (F,S) Repeatable

AT 323 Functional Exercise Training 2(1-2)
Course applications include exercise program design, aspects of functional training, and components of various types of exercise regimens as related to injury prevention and recovery. (S)

AT 330 Lower Extremity Evaluation 3(2-2)
An in-depth study of assessment techniques and protocols applicable to injuries to the lower extremities. Prerequisite: AT 279, BIOL 223, 223L and approval of program director. (F)

AT 331 Upper Extremity Evaluation 3(2-2)
An in-depth study of assessment techniques and protocols applicable to injuries to the upper extremities. Prerequisite: AT 279, BIOL 223, 223L and approval of program director. (S)

AT 332 Head, Neck, and Spine Evaluation 3(2-2)
An in-depth study of assessment techniques and protocols applicable to injuries to the head, neck and spine. Prerequisite: AT 331 and approval of program director. (F)

AT 339 Clinical Pathology and Assessment 3(2-2)
Study of differential signs and symptoms produced by systemic diseases affecting physical activity in individuals to enable the athletic trainer in making sound clinical decisions. Prerequisite: AT 332 or approval of program director. (S)

AT 379 Practicum in Athletic Training II 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: AT 279 and acceptance into clinical portion of program. (F)

AT 389 Practicum in Athletic Training III 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: AT 379. (S)

AT 400 Workshop (1-5 VAR)
Learning experiences in athletic training offered n large block of time not corresponding to the weekly meeting times of the regular course offerings. Prerequisite: approval of the program director. (*) Repeatable

AT 419 Athletic Training Field Experience (1-5 VAR)
Learning experiences to be conducted in an actual athletic training or related environment and supervised by an approved Athletic Training clinical instructor (ACI). Prerequisite: acceptance into clinical portion of program. Corequisite: one of the following courses: AT 379, 389, 479, 489. (F,S,SS) Repeatable

AT 430 Therapeutic Modalities 3(2-2)
Study of theories and application of modalities used in the athletic training setting for the treatment of injuries. Prerequisite: AT 279 and approval of program director. (F)

AT 431 Therapeutic Exercise 3(2-2)
Study of current rehabilitation theories and application in the athletic training setting. Prerequisite: AT 430. (F)

AT 443 Administration in Athletic Training 3(3-0)
An examination of current topics in athletic training including legal liability, athletic training administration issues, and budgetary concerns. Prerequisite: approval by program director. (S)

AT 479 Practicum in Athletic Training IV 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: AT 389. (F)

AT 488 BOC Test Prep 1(0-2)
Instruction, practice, evaluation and application of the Clinical Proficiencies and education competencies of NATA. Prerequisite: AT 479. Corequisite: AT 489 (S)

AT 489 Practicum in Athletic Training V 1(0-2)
Continued instruction, practice and evaluation of clinical proficiencies, and clinical experience. Prerequisite: AT 479. (S)

AT 491 Special Topics (1-5 VAR)
Prerequisite: permission of program director. (*) Repeatable

AT 494 Field Experience (1-5 VAR)
Learning experience to be conducted in athletic training related clinical environment and supervised by the athletic training education program. Prerequisite: approval of program director. (S/U grading) (*) Repeatable

AT 495 Independent Study (1-5 VAR)
Prerequisite: approval of program director. (S/U grading) (*) Repeatable

BILINGUAL BICULTURAL EDUCATION (BBE)

UNDERGRADUATE COURSES

BBE 400 Workshop (1-3 VAR)
Development of classroom materials and curriculum in bilingual education. (*) Repeatable

BBE 401 Teaching English Language Learners 3(3-0)
Methods and techniques of teaching English to children of linguistically diverse backgrounds; K-6 and 7-12 focus. Field experience required. Prerequisite: admission to Teacher Education Program. (SS)

BBE 403 Content Instruction for EL Learners 3(3-0)
Methods and techniques for teaching content area subjects to students of linguistically different backgrounds; K-6 and 7-12 focus. Field experience required. Prerequisite: admission to Education. (F)

BBE 420 Literacy for EL Learners 3(3-0)
Methods and techniques of teaching Literacy to K-12 English Language Learners. Field experience required. Prerequisite: admission to Education, RDG 410/RDG 435 or a beginning course in reading. (SS)

BBE 460 ELL Assessment & Administration 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. (F,S)

BIOL 121 Environmental Conservation 3(3-0)
Historical review of humankind's interrelationship with and impact on the natural environment. Basic principles of ecology and current issues relating to the use of natural resources and environmental problems. (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 181 College Biology I/Organismal Bio 3(3-0)
Biological diversity and structure-function relationships, evolution and ecology. Prerequisite: one year each of high school algebra, biology, and chemistry or MATH 098, BIOL 100/L and CHEM 111/L. Corequisite: BIOL 181L. (F,S)

BIOL 181L College Biology I/Organismal Bio Lab 1(0-2)
Corequisite: BIOL 181. (F,S)

BIOL 182 College Biology II/Cellular Biology 3(3-0)
Continuation of BIOL 181. Basic cell structure and function, reproduction and heredity. Prerequisites: BIOL 181/181L and CHEM 121/121L. Corequisite: BIOL 182L. (F,S)

BIOL 182L College Biology II/Cellular Bio Lab 1(0-2)
Prerequisite: BIOL 181/181L and CHEM 121/121L. Corequisite: BIOL 182. (F,S)

BIOL 201 Botany 2(2-0)
Forms, basic structures, relationships, life histories and evolutionary trends of representatives of the major autotrophic plant groups. Prerequisite: BIOL 181/181L and BIOL 182/182L. Corequisite: BIOL 201L. (S)

BIOL 201L Botany Laboratory 2(0-4)
Prerequisite: BIOL 181/181L and BIOL 182/182L. Corequisite: BIOL 201. (S)

BIOL 202 Zoology 3(3-0)
Study of structure, function, evolution, biodiversity, behavior, and ecology of vertebrates and invertebrates, including protozoans and human parasites. Prerequisite: BIOL 181/181L and BIOL 182/182L. Corequisite: BIOL 202L. (F)

BIOL 202L Zoology Laboratory 1(0-2)
Prerequisite: BIOL 181/181L and BIOL 182/182L. Prerequisite: BIOL 202. (F)

BIOL 206 Introduction to Microbiology 3(3-0)
For students of nursing and allied health. Applied aspects of medical microbiology. Prerequisite: one year of high school biology or BIOL 100/L; and one year of high school chemistry or CHEM 111/L. Corequisite: BIOL 206L. (F)

BIOL 206L Introduction to Microbiology Lab 1(0-3)
Corequisite: BIOL 206. (F)

BIOL 220 Medical Terminology 2(2-0)
Basic prefixes, word roots, combining forms and suffixes of medical terminology and human anatomy are covered, including pronunciation and patient charting. (S)

BIOL 223 Human Physiology and Anatomy I 3(3-0)
Study of human physiology and anatomy designed for students who require or desire a thorough understanding of the functional and structural aspects of the human body. Not for the majority of biology majors except Teacher Education. Topics include body orientation, physiologically important molecules, the cell, tissues, integument, skeleton, muscle, nervous system, and special senses. Prerequisite: one year of high school biology or BIOL 100/100L; and one year of high school chemistry or CHEM 111/111L. Corequisite: BIOL 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, fluid-electrolyte balance, cardiovascular, and reproduction. Prerequisite: one year of high school biology or BIOL 100/100L; and one year of high school chemistry or CHEM 111/111L. 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 181/181L and BIOL 182/182L, and CHEM 301/301L. CHEM 302/302L and MATH 221 are strongly recommended. Corequisite: BIOL 301L. (F)

BIOL 301L General Microbiology Lab 2(0-4)
Corequisite: BIOL 301. (F)

BIOL 302 Medical Microbiology 2(2-0)
Survey of pathogenic bacteria, viruses and fungi Prerequisite: BIOL 301 or permission of the instructor. Corequisite: BIOL 302L. (S/O)

BIOL 302L Medical Microbiology Lab 2(0-4)
Corequisite: BIOL 302. (S/O)

BIOL 321 Comparative Vertebrate Anatomy 3(3-0)
Comparative study of developmental and functional anatomy of vertebrate animals. Prerequisite: BIOL 181/181L, BIOL 182/182L and BIOL 202/L; or permission of instructor. Corequisite: BIOL 321L. (S)

BIOL 321L Comparative Vertebrate Anatomy Lab 2(0-4)
Corequisite: BIOL 321. (S)

BIOL 350 Mendelian and Population Genetics 2(2-0)
Survey of basic Mendelian genetics, genetic mapping and population genetics. Prerequisite: BIOL 181/181L, BIOL 182/182L, and MATH 121. Also strongly recommended MATH 156. (F,S)

BIOL 351 Molecular Biology and Genetics 2(2-0)
Study of the molecular flow of genetic information, gene regulation and cancer genetics. Prerequisite: BIOL 181/181L and BIOL 182/182L; and either BIOL 301 or BIOL 350; and CHEM 121/121L and CHEM 122/122L. (F,S)

BIOL 351L Advanced Genetics and Molecular Biology Laboratory 2(0-4)
Molecular biology investigations of gene regulation and recombinant DNA. Prerequisite: BIOL 350 and CHEM 121/121L and CHEM 122/122L. Corequisite: BIOL 351. (S)

BIOL 352 Evolutionary Biology and Ecology 3(3-0)
Historical view of the theory of evolution with emphasis on the relationship between organisms and the environment, and the mechanisms and forces that produce evolutionary change. Prerequisite: BIOL 181/181L and BIOL 182/182L; and either BIOL 201 or BIOL 202. BIOL 350 recommended. (S)

BIOL 378 Laboratory in Teaching Biology 1(0-2)
Laboratory preparation, safety, instruction and methods under the guidance and supervision on an instructor. Prerequisite: approval of instructor. (F,S) Repeatable

BIOL 392 Research (1-3 VAR)
Faculty directed research project for undergraduate student. May be repeated for a maximum of 3 credits, total. Prerequisite: approval of department chair. (F,S,SS) Repeatable (3)

BIOL 394 Field Experience (1-4 VAR)
Volunteer work experience under program director, program coordinator, and faculty supervisor (S/U grading) (F,S,SS) Repeatable

BIOL 402 Immunology 3(3-0)
Humoral and cell-mediated immunity including immune disorders and theories of immunological techniques. Prerequisite: BIOL 301/301L. (S)

BIOL 403 Virology 2(2-0)
Molecular aspects of viral infection of bacteria, plants, and animals including viral replication, host range, host defenses, antiviral drugs, and viral ecology. Prerequisite: BIOL 301 and 301L, or BIOL 351. (F/E)

BIOL 412 Cellular Biology 3(3-0)
Structural and functional organization of the cell, life cycles of cells, intracellular digestion, protein synthesis and cell death. Prerequisite: CHEM 301/301L and either BIOL 301/301L or both BIOL 350 and 351. CHEM 302/302L is strongly recommended. Corequisite: BIOL 412L. (S)

BIOL 412L Cellular Biology Lab 1(0-3)
Corequisite: BIOL 412. (S)

BIOL 413 Plant Physiology 2(2-0)
Thorough examination of general physiology and function of plant body systems. Prerequisite: BIOL 201/201L and CHEM 301/301L. Corequisite: BIOL 413L. (S/O)

BIOL 413L Plant Physiology Lab 2(0-4)
Prerequisite: BIOL 191/191L, 192/192L, 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 202 and CHEM 301/301L. CHEM 302/302L and MATH 156 are strongly recommended. Corequisite: BIOL 414L. (F)

BIOL 414L Vertebrate Physiology Lab 1(0-2)
Corequisite: BIOL 414. (F)

BIOL 421 Histology 2(2-0)
A microscopic study of vertebrate tissues and organs. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 421L. (S/O)

BIOL 421L Histology Lab 2(0-4)
Corequisite: BIOL 421. (S/O)

BIOL 432 Developmental Biology 2(2-0)
Theory and principles of the development of representative vertebrate and invertebrate animals, with particular emphasis on the frog, chick, and Drosophila. Prerequisite: BIOL 202/202L and BIOL 350 and BIOL 351; or permission of instructor. Corequisite: 432L. (S/E)

BIOL 432L Developmental Biology Lab 2(0-4)
Corequisite: BIOL 432. (S/E)

BIOL 440 Molecular Genetics 2(2-0)
Molecular and Biochemical basis of heredity. Regulation of gene expression. Prerequisite: BIOL 351 and 351L, or permission of instructor. Corequisite: BIOL 440L. (S)

BIOL 440L Molecular Genetics Lab 1(0-2)
Corequisite: BIOL 440 (S)

BIOL 441 Freshwater Invertebrate Zoology 2(2-0)
Classification, phylogeny, systematics, morphology, physiology, and natural history of freshwater invertebrates inclusive of insects. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 441L. (S/O)

BIOL 441L Freshwater Invertebrate Zoology Lab 2(0-4)
Corequisite: BIOL 441. (S/O)

BIOL 443 Limnology 2(2-0)
Biology, chemistry and physics of lakes and rivers. Prerequisite: BIOL 201/201L and BIOL 202/202L or permission of instructor. Corequisite: BIOL 443L. (S/E)

BIOL 443L Limnology Lab 2(0-4)
Corequisite: BIOL 443 (S/E)

BIOL 450 Survey of Genomics and Bioinformatics 2(2-0)
Theory and practice of genome analysis including use of statistics, databases and biomolecular sequence analysis software. Prerequisite: BIOL 351, and MATH 156 or MATH 356, or permission of instructor. (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: BIOL 301/301L or permission of instructor. Corequisite: BIOL 452L. (F/E)

BIOL 452L Advanced Microscopy Lab 2(0-4)
Corequisite: BIOL 452. (F/E)

BIOL 453 Ecology 2(2-0)
Interrelationships among organisms and their environment, employing quantitative methods and conceptual models. Prerequisite: BIOL 352 and MATH 126 or MATH 221, or permission of instructor. Corequisite: BIOL 453L. (F/E)

BIOL 453L Ecology Field Studies 2(0-4)
Corequisite: BIOL 453. (F/E)

BIOL 461 Applied Geospatial Technology (GIS/GPS) 3(3-0)
Theory and practice of using Geographic Information Systems (GIS) and Global Positioning Systems (GPS) for geographic data analysis, and to georeference data. (F/O)

BIOL 462 Environmental Management 3(3-0)
Scientific basis of environmental regulations applied to air/water quality, solid waste, and hazardous waste; technologies and procedures used by generators to achieve compliance. Prerequisite: BIOL 352 or junior standing. (S/O)

BIOL 465 Environmental Toxicology 3(3-0)
Basic principles of toxicology, interaction of xenobiotics with living organisms and the environment, and the impact of pollutants on the ecosystem. Prerequisite: BIOL 181/181L and BIOL 182/182L and CHEM 302/302L, or permission of instructor. (F/E)

BIOL 473 Med. Tech. Clinical Rotation I   12(5-14)
Coursework and clinical training in an affiliated medical laboratory sciences facility. Specific course of study determined by facility. Prerequisite: consent of instructor. (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 202/202L or permission of instructor. Corequisite: BIOL 479L. (F/O)

BIOL 479L Ichthyology Lab 1(0-2)
Corequisite: BIOL 479. (F/O)

BIOL 481 Entomology 2(2-0)
Evolutionary biology and management of insects. Impact of arthropods on the balance of nature. Medical and veterinary entomology. Arthropods as vectors of human and animal diseases. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 481L. or permission of instructor. (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 202/202L or permission of instructor. Corequisite: BIOL 483L. (S/E)

BIOL 483L Mammalogy Lab 1(0-2)
Corequisite: BIOL 483. (S/E)

BIOL 484 Ornithology 2(2-0)
Classification, life history, laboratory and field identification of birds. Prerequisite: BIOL 202/202L or permission of instructor. Corequisite: BIOL 484L. (S/O)

BIOL 484L Ornithology Lab 1(0-2)
Corequisite: BIOL 484. (S/O)

BIOL 485 Plant Taxonomy 2(2-0)
Identification of the common vascular plant families of Colorado with an emphasis on the flowering plants; study of their systematic relationships. Prerequisite: BIOL 201/201L or permission of instructor. Corequisite: BIOL 485L. (F)

BIOL 485L Plant Taxonomy Lab 2(0-4)
Corequisite: BIOL 485. (F)

BIOL 486 Field Botany 3(3-0)
Principles and applications of field techniques used in vegetation assessment, surveys, and vegetation monitoring. Prerequisite: BIOL 201/201L. (*)

BIOL 491 Special Topics (1-4 VAR) (F,S,SS) Repeatable

BIOL 492 Research (1-3 VAR)
Faculty directed research project for undergraduate student. May be repeated for a maximum of 3 credits, total. Prerequisite: approval of department chair. (F,S,SS) Repeatable (3)

BIOL 493 Seminar 1(1-0)
Seminar for majors and minors concerning unique, current, or unusual topics in biology. Speakers may include guests, faculty, or students. Required of majors. Prerequisite: senior standing and completion of all biology core courses. (F,S)

BIOL 494 Field Experience (1-4 VAR)
Volunteer work experience under program director, program coordinator and faculty supervisor. (S/U grading). (F,S,SS) Repeatable

BIOL 495 Independent Study (1-4 VAR)
Prerequisite: junior standing, biology major, permission of instructor and department. (F,S,SS) Repeatable

BIOL 498 Internship (5-15 VAR)
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)

BIOL 503 Virology 2(2-0)
Molecular aspects of viral infection of bacteria, plants, and animals including viral replication, host range, host defenses, antiviral drugs, and viral ecology. Prerequisite: BIOL 301/301L or BIOL 351 or permission of instructor. (F/E)

BIOL 510 Foundations in Graduate Studies 3(3-0)
Laboratory safety. Effective sourcing, use, and interpretation of the literature. Scientific methodology, writing, and review of research ethics. Development of a thesis or internship plan. Prerequisite: graduate standing. (F)

BIOL 512 Cellular Biology 3(3-0)
Structural and functional organization of the cell, life cycles of cells, intracellular digestion, protein synthesis and cell death. Prerequisite: CHEM 301/301L and either BIOL 301/301L or both BIOL 350 and 351. CHEM 302/302L is strongly recommended. Corequisite: BIOL 512L. (S)

BIOL 512L Cellular Biology Lab 1(0-3)
Corequisite: BIOL 512 (S)

BIOL 513 Plant Physiology 2(2-0)
Thorough examination of general physiology and function of plant body systems. Prerequisite: BIOL 191/191L, 192/192L, 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 202/202L or permission of instructor. Corequisite: BIOL 521L. (S/O)

BIOL 521L Histology Lab 2(0-4)
Corequisite: BIOL 521. (S/O)

BIOL 532 Developmental Biology 2(2-0)
Theory and principles of the development of representative vertebrate and invertebrate animals, with particular emphasis on the frog, chick, and Drosophila. Prerequisite: BIOL 202/202L and BIOL 350 and BIOL 351; or permission of instructor. Corequisite: BIOL 532L. (S/E)

BIOL 532L Developmental Biology Lab 2(0-4)
Corequisite: BIOL 532. (S/E)

BIOL 540 Molecular Genetics 2(2-0)
Molecular and biochemical basis of heredity. Regulation of gene expression. Prerequisite: BIOL 351 and 351L or permission of instructor. Corequisite: BIOL 540L. (S)

BIOL 540L Molecular Genetics Lab 1(0-2)
Corequisite: BIOL 540. (S)

BIOL 541 Freshwater Invertebrate Zoology 2(2-0)
Classification, phylogeny, systematics, morphology, physiology, and natural history of freshwater invertebrates inclusive of insects. Corequisite: BIOL 541L. (S/O)

BIOL 541L Freshwater Invertebrate Zoology Lab 2(0-4)
Corequisite: BIOL 541. (S/O)

BIOL 543 Limnology 2(2-0)
Biology, chemistry, and physics of lakes and rivers. Corequisite: BIOL 543L. (S/E)

BIOL 543L Limnology Lab 2(0-4)
Corequisite: BIOL 543. (S/E)

BIOL 550 Survey of Genomics and Bioinformatics 2(2-0)
Theory and practice of genome analysis including use of statistics, databases and biomolecular sequence analysis software. Prerequisite: BIOL 351, and MATH 156 or MATH 356 or MATH 550, or permission of instructor. (F/O)

BIOL 550L Survey of Genomics and Bioinformatics Lab 1(0-2)
Prerequisite: BIOL 351, and MATH 156 or MATH 356. Corequisite: BIOL 550. (F/O)

BIOL 552 Advanced Microscopy 2(2-0)
Theory and application of microscopy to the biological sciences. Includes preparation of cells and tissues for examination, scope operation, and image analysis. Corequisite: BIOL 552L. (F/E)

BIOL 552L Advanced Microscopy Lab 2(0-4)
Corequisite: BIOL 552. (F/E)

BIOL 553 Ecology 2(2-0)
Interrelationships among organisms and their environment, employing quantitative methods and conceptual models. Prerequisite: BIOL 352, and MATH 126 or MATH 221, or permission of instructor. Corequisite: BIOL 553L. (F/E)

BIOL 553L Ecology Field Studies 2(0-4)
Corequisite: BIOL 553. (F/E)

BIOL 561 Applied Geospatial Technology (GIS/GPS) 3(3-0)
Theory and practice of using Geographic Information Systems (GIS) and Global Positioning Systems (GPS) for geographic data analysis, and to georeference data. (F/O)

BIOL 562 Environmental Management 3(3-0)
Scientific basis of environmental regulations applied to air/water quality, solid waste, and hazardous waste; technologies and procedures used by generators to achieve compliance. Prerequisite: BIOL 352 or graduate standing. (S/O)

BIOL 565 Environmental Toxicology 3(3-0)
Basic principles of toxicology, interaction of the xenobiotics with living organisms and the environment, and the impact of pollutants on the ecosystem. Prerequisite: BIOL 181/181L and BIOL 182/182L and CHEM 302/302L, or permission of instructor. (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 202/202L 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 588 Internship Seminar 1(1-0)
Graduate internship presentation and examination for completion of MS degree option within the Graduate Programs in Natural Sciences. Prerequisite: graduate standing. (F,S,SS)

BIOL 589 Thesis Defense 1(1-0)
Thesis presentation for completion of MS degree option within the Graduate Programs in Natural Sciences. Prerequisite: graduate standing. (F,S,SS)

BIOL 591 Special Topics (1-4 VAR) (F,S,SS) Repeatable

BIOL 592 Research (1-6 VAR)
Faculty directed research project for graduate students. Prerequisite: graduate standing and approval of department chair or program director. (S/U grading) (F,S,SS) Repeatable

BIOL 593 Seminar 1(1-0)
An interdisciplinary seminar on topics appropriate to the application of natural sciences. Prerequisite: graduate standing and BIOL/CHEM 510. (*)

BIOL 595 Independent Study (1-4 VAR)
Prerequisite: graduate standing, biology major, permission of instructor and department. (F,S,SS)

BIOL 598 Graduate Internship (1-4 VAR)
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member. Prerequisite: graduate standing. (S/U grading) (F,S,SS)

BIOL 599 Thesis Research (1-6 VAR)
Repeatable for a maximum of 6 credits. Continued enrollment is dependent upon satisfactory progress in thesis work. Prerequisite: graduate standing and approval of department chair or program director. (IP and S/U grading). (F,S,SS) Repeatable (6)

BUSINESS ADMINISTRATION (BUSAD)

UNDERGRADUATE COURSES

BUSAD 101 Business-Careers and Opportunities 1(1-0)
Introduction to the world of business that will provide insights on careers, business disciplines, and the world of business. (F,S)

BUSAD 265 Inferential Statistics and Problem Solving 3(3-0)
Statistical methods in business, sampling, parameter estimation, hypothesis testing, correlation, multiple regression and chi square tests. Use of problem solving methods. Prerequisite: MATH 121. (F,S)

BUSAD 270 Business Communications 3(3-0)
Means of extending management capabilities through effective internal and external communications, including data organization and presentation. Prerequisite: ENG 101 and 102. (F,S)

BUSAD 302 Ethics in Business 3(3-0)
Examination of issues addressing ethical, legal, social and environmental responsibilities of businesses toward government, customers, employees, and the general public. Prerequisite: junior standing. (F,S)

BUSAD 360 Advanced Business Statistics 3(3-0)
Development of advanced statistical techniques to support business decision-making. Topics include advanced multiple regression analysis, analysis of variance and nonparametric techniques. Prerequisite: BUSAD 265 and junior standing. (F,S)

BUSAD 475 International Business 3(3-0)
Opportunities and problems of multinational firms including environmental factors and formulation of strategies and policies for all functional areas of business. Prerequisite: FIN 330, MGMT 201 and MKTG 340. (F,S)

BUSAD 480 Business Consulting 3(3-0)
Integrating prior studies in business into a realistic approach to assist in solving problems faced by selected firms and organizations in the community. Prerequisite: senior standing in the School of Business and completion of all foundation and fundamentals courses. (*)

BUSAD 490 Special Projects (1-6 VAR) (*) Repeatable (6)

BUSAD 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable (6)

BUSAD 493 Senior Seminar 1(1-0)
Designed to help majors draw connections among the business disciplines. The course provides an in-depth examination of contemporary issues in the business environment. Prerequisite: senior standing. (F,S)

BUSAD 495 Independent Study (1-3 VAR)
Prerequisite: senior standing and permission of department chair. (*) Repeatable (6)

BUSAD 498 Internship (1-6 VAR)
Supervised field work in selected business, social and governmental organizations; supplemented by written reports (S/U grading). Prerequisite: junior or senior standing in the School of Business and permission of internship coordinator. (*) Repeatable (6)

GRADUATE COURSES

BUSAD 501 Fundamentals of Statistics 3(3-0)
This class prepares students to solve business problems using statistics and business research methods using statistical estimation, hypothesis testing, and advanced statistical methods. Prerequisite: admission to MBA. (*)

BUSAD 502 Business Ethics and Environment 3(3-0)
The impact of continued social, political, economic, technological, and legal pressures upon ethical business issues and managerial decision making. Prerequisite: admission to MBA or permission of MBA Director. (*)

BUSAD 505 Inferential Statistics and Problem Solving 3(3-0)
Statistical methods in business, sampling, parameter estimation, hypothesis testing, correlation, multiple regression and chi square tests. Use of problem solving methods. (*)

BUSAD 545 Advanced Quantitative Analysis for Business 3(3-0)
This class prepares students to solve business problems using advanced quantitative methods and business modeling techniques. Prerequisite: admission to MBA. (*)

BUSAD 575 International Business 3(3-0)
The objective of this course is to familiarize students with the dynamics and complexity of managing business across the globe. Prerequisite: admission to MBA or permission of MBA Director. (*)

BUSAD 580 Business Research Methodology 3(3-0)
Fundamentals of qualitative and quantitative research design including development of hypothesis and assessment techniques in preparation for undertaking research projects. Prerequisite: admission to MBA or permission of MBA Director. (*)

BUSAD 591 Special Topics 3(3-0)
Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

BUSAD 592 Research (1-6 VAR)
The student will work under the close supervision of a graduate faculty member in basic or applied research resulting in a thesis or report of high academic quality. (IP and S/U grading) (*)

BUSAD 595 Independent Study (1-3 VAR)
Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

CIVIL ENGINEERING TECHNOLOGY (CET)

UNDERGRADUATE COURSES

CET 101 Intro to Civil Engineering Technology 2(1-2)
Introduction to the field of Civil Engineering Technology: review career opportunities, study the engineering design process, explore issues of professional ethics, and do team projects. (F)

CET 102 Surveying I 3(0-6)
Beginning course in plane surveying; covers proper chaining techniques, care and use of engineering levels, differential leveling, traversing, and construction surveying. (F)

CET 103 Surveying II 3(0-6)
Introduction to land, topographic, and construction surveying. Prerequisite: CET 102, or permission of instructor. Corequisite: CET 116. (S)

CET 115 Civil Drafting I 3(0-6)
An introduction to basic drafting, AutoCAD and Structural Detail drafting. Corequisite: CET 102. (F)

CET 116 Civil Drafting II 3(0-6)
An introduction to maps, traverses, contours, plans and profiles, cut and fills. An introduction to architectural plans, elevations and section. Prerequisite: CET 115. Corequisite: CET 103. (S)

CET 202 Statics 3(3-0)
Basic concepts and application of static forces, couples, resultants, equilibrium, friction, frames, trusses, free body diagrams, and centroids. Prerequisite: MATH 121. (F)

CET 206 Strength of Materials 4(3-2)
A study of the response of materials to loads with attention to stresses, strains, elastic and plastic responses to loading. Experiments demonstrate those principles. Prerequisite: CET 202. (S)

CET 207 Construction Materials and Methods 3(3-0)
Properties, uses and methods of assembly of building materials as they apply to the construction industry. (F)

CET 208 Concrete and Asphalt Materials 3(2-2)
Study of Portland cement concrete and bituminous pavements. Manufacturing, mix design, placing and finishing of these materials. The laboratory includes ASTM testing of these materials. (S)

CET 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 Building Cost Estimating 3(3-0)
Estimating related to building construction industry. Quantity take-off, labor and material costs, records and assembling a general contractor's bid. Prerequisite: CET 207 or permission of instructor. (*)

CET 305 Heavy/Highway Cost Estimating 3(3-0)
Estimating relating to heavy and highway construction. Covers heavy equipment selection and use, project scheduling and production rates. Prerequisite: junior standing or permission of instructor. (F)

CET 312 Route Surveying 3(2-2)
Highway and route surveys, horizontal and vertical curves, grades, slope staking and earthwork. Prerequisite: CET 103 and MATH 124. (*)

CET 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. ASTM field tests will be done in the laboratory. Prerequisite: CET 206. (S)

CET 316 Structural Analysis 3(3-0)
Introduction to the analysis of statically determinate and indeterminate structures. Prerequisite: CET 206, MATH 126, PHYS 201/L. (F)

CET 317 Hydraulics 3(2-2)
Study of non-compressible fluids including the flow of water in pipes and open channels. Laboratory involves measuring static pressure, head losses, and flow rates. Prerequisite: CET 202, MATH 126, PHYS 201/L. (F)

CET 372 Traffic Analysis and Control 3(2-2)
Introduction to traffic engineering including traffic system characteristics, traffic studies, capacity analysis, and traffic control. Laboratory activities include traffic data collection and analysis. Prerequisite: PHYS 201 or CET 222 or permission of instructor. (S)

CET 401 Land Surveying 3(3-0)
Boundary control, property descriptions, deeds, subdivisions, emphasizing the legal aspects of land law and surveying. Prerequisite: CET 103 or permission of instructor. (*)

CET 404 Structural Steel Design 3(3-0)
Structural steel design of beams, columns, girders and trusses to AISC standards. Prerequisite: CET 316. (S)

CET 405 Reinforced Concrete Design 3(3-0)
Design of reinforced concrete beams, columns, girders and floor systems to conform to current ACI code. Prerequisite: CET 316. (F)

CET 412 Hydrology 3(3-0)
Hydrologic cycle including precipitation, streamflow, ground-water runoff and the preparation of hydro graphs and frequency analysis. Prerequisite: MATH 124, CET 317. (S)

CET 414 Bridge Design 3(3-0)
Design of bridge slabs, beams, abutments, wingwalls, piers, and footings. Prerequisite: senior status. (*)

CET 415 Water and Sewer System Design 3(3-0)
Fundamental principles of water supply and sewage design. Prerequisite: CET 317, CHEM 111. (F)

CET 455 Senior Project Seminar 1(1-0)
Students formulate a proposal for their senior project and make written and oral presentations of the proposal. Speakers from industry present real-world examples. Prerequisite: senior standing in CET and permission by Department Chair. (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, CET 208, CET 315, CET 372. (F)

CET 475 Engineer-In-Training Preparation 3(3-0)
This course is designed as preparation for the state Engineer-In-Training examination. Subjects include general engineering and civil engineering topics. Prerequisite: senior standing or approval of instructor. (S)

CET 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable

CET 495 Independent Study (1-3 VAR)
Directed study for students interested in specific areas of CET. Prerequisite: junior standing in CET and permission of instructor. (F,S) Repeatable

CET 496 Cooperative Education Placement (1-4 VAR)
Industrial cooperative education work experience under the direction of a field supervisor and faculty member. Prerequisite: permission of instructor. (F,S,SS) Repeatable

CHEMISTRY (CHEM)

UNDERGRADUATE COURSES

CHEM 101 Chemistry and Society 3(3-0)
Chemistry related to the everyday world. Drugs, food, pollution, pesticides, consumer products, energy, and home health. Principally for non-science majors. (F,S)

CHEM 101L Chemistry and Society Lab 1(0-2)
Laboratory is optional. Experiments to exemplify the logical steps of problem solving and explore the physical and chemical world. Corequisite: CHEM 101. (F,S)

CHEM 111 Principles of Chemistry 3(3-0)
Fundamental laws, theories and principles of chemical reactions. Credit not applicable for chemistry majors or minors. Prerequisite: satisfactory math placement score or permission of the instructor. Corequisite: CHEM 111L. (F,S)

CHEM 111L Principles of Chemistry Lab 1(0-2)
Experiments using common chemical equipment and techniques to aid the student in learning what occurs in the chemical laboratory. Corequisite: CHEM 111. (F,S)

CHEM 121 General Chemistry I 4(4-0)
For science, engineering and pre-professional curricula. Atomic theory, chemical bonding, periodic properties, states of matter, oxidation-reduction, stoichiometry, thermo-chemistry, inorganic nomenclature. Prerequisite: one year high school chemistry or equivalent, and math placement at College Algebra level or higher. Corequisite: CHEM 121L. (F,S)

CHEM 121L General Chemistry Lab I 1(0-2)
Corequisite: CHEM 121. (F,S)

CHEM 122 General Chemistry II 4(4-0)
Continuation of CHEM 121. Thermodynamics, kinetics, equilibria, nuclear chemistry, electrochemistry, acids and bases, solutions, descriptive inorganic chemistry. Prerequisite: CHEM 121. Corequisite: CHEM 122L. (F,S)

CHEM 122L General Chemistry Lab II 1(0-2)
Laboratory component to CHEM 122. Corequisite: CHEM 122. (F,S)

CHEM 150 (PHYS 150) Elementary Concepts in Physics and Chemistry 4(3-2)
Hands-on standards-based approach to understanding basic concepts of physics and chemistry. Integrated lecture, lab and discussion periods. (F,S,SS)

CHEM 160 Introduction to Forensic Science 3(3-0)
Overview of Forensic Science. Crime scene investigation. Evidence collection. Microscopy techniques. Arson analysis. Fingerprints. Serology and DNA use. Corequisite: CHEM 160L. (F,S,SS)

CHEM 160L Intro to Forensic Science Lab 1(0-2)
Overview of Forensic Science Laboratory. Evidence handling and collection. Microscopy techniques. Arson analysis, Fingerprints. DNA fingerprinting. Corequisite: CHEM 160. (F,S,SS)

CHEM 211 Introduction to Organic Chemistry 3(3-0)
Survey of organic chemistry chemical structure, reactivity and functional groups are presented in context of relevance to society. Prerequisite: CHEM 111. Corequisite: CHEM 211L (S)

CHEM 211L Introduction to Organic Chemistry Lab 1(0-2)
Survey of organic chemistry laboratory course. Basic organic laboratory techniques and skills, both micro and macro scale are presented. Prerequisite: CHEM 111. Corequisite: CHEM 211. (S)

CHEM 221 Inorganic Chemistry 2(2-0)
Basic principles of inorganic chemistry. The main properties, reaction chemistry, and descriptive chemistry of inorganic elements and compounds. Prerequisite: CHEM 122. Corequisite: CHEM 221L. (F)

CHEM 221L Inorganic Chemistry Lab 1(0-3)
Inorganic laboratory techniques, inorganic qualitative analysis, synthesis and characterization. Corequisite: CHEM 221. (F)

CHEM 260 Forensic Chemistry I 3(3-0)
Investigation of comparative/visual forensic analysis techniques. Topics include fingerprinting, bloodstain pattern analysis, fiber comparisons, and firearms analysis. Prerequisite: CHEM 111 or 121 and CHEM 160. (S)

CHEM 260L Forensic Chemistry I Laboratory 1(0-3)
Development of laboratory skills for comparative/visual forensic analysis. Topics include fingerprinting, bloodstain pattern analysis, fiber comparisons, and firearms analysis. A more in-depth examination of CHEM 160L topics. Prerequisite: CHEM 111 or 121 and CHEM 160L. Corequisite: CHEM 260. (S)

CHEM 291 Special Topics (1-5 VAR)
Prerequisite: permission of instructor. (*) Repeatable

CHEM 292 Research (1-3 VAR)
Faculty directed research project for undergraduate first or second-year student. May be repeated for a maximum of 3 credits total. Prerequisite: Department Chair approval. (F,S,SS) Repeatable (3)

CHEM 301 Organic Chemistry I 3(3-0)
For majors and pre-professional students requiring a strong background in organic chemistry. Organic reactions and mechanisms as related to molecular structure. Prerequisite: CHEM 122. Corequisite: CHEM 301L. (F,S)

CHEM 301L Organic Chemistry Lab I 2(0-6)
Corequisite: CHEM 301. (F,S)

CHEM 302 Organic Chemistry II 3(3-0)
Continuation of CHEM 301. Prerequisite: CHEM 301. Corequisite: CHEM 302L. (F,S)

CHEM 302L Organic Chemistry Lab II 2(0-6)
Prerequisite: CHEM 301L. Corequisite: CHEM 302. (F,S)

CHEM 311 Survey of Biochemistry 3(3-0)
Survey of biochemistry. For pre-health professional students. Intermediary metabolism is taught at an intermediate level and in the context of human nutrition and clinical applications. Prerequisite: CHEM 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. (F,S) Repeatable (2)

CHEM 389 Scientific Literature Review 1(1-0)
Surveys of both print and web-based chemical and biochemical literature. May be repeated twice. Prerequisite: CHEM 302. (F,S) Repeatable (2)

CHEM 401 Advanced Organic Chemistry 3(3-0)
Topics of advanced organic chemistry, including organic reactions, mechanisms, natural products, and spectroscopy. Prerequisite: CHEM 302, or permission of instructor. Corequisite: CHEM 401L. (*)

CHEM 401L Advanced Organic Chemistry Lab 1(0-3)
Laboratory course to accompany CHEM 401. Molecular structure determination by chemical and instrumental methods. Corequisite: CHEM 401. (*)

CHEM 403 Polymer Chemistry 3(3-0)
Study of synthetic polymers including synthesis, mechanisms of formation, structure of elucidation, reactivity, properties, and industrial application. Biopolymers also will be considered. Prerequisite: CHEM 302/302L. (*)

CHEM 411 Biochemistry I 3(3-0)
Chemistry of constituents of living matter, including proteins, carbohydrates, nucleic acids and lipids. An introduction to enzymes and coenzymes. Prerequisite: CHEM 302, or permission of instructor. (F)

CHEM 412 Biochemistry II 3(3-0)
Continuation of CHEM 411. Intermediary metabolism of carbohydrates, lipids, and amino acids. Bioenergetics. Prerequisite: CHEM 411. Corequisite: CHEM 412L. (S)

CHEM 412L Biochemistry II Lab 2(0-6)
Prerequisite: CHEM 302. Corequisite: CHEM 412. (*)

CHEM 413 Molecular Basis of Disease 3(3-0)
This advanced seminar course explores the molecular nature of disease and engages students in the study of diseases using current topical biochemical literature. Prerequisite: CHEM 411. (*)

CHEM 419 Instrumental Analysis 3(3-0)
Instrumental techniques in chemical separations, electrochemistry, atomic, and molecular spectroscopy. Prerequisite: CHEM 317 or permission of instructor. Corequisite: CHEM 419L. (S)

CHEM 419L Instrumental Analysis Lab 2(0-6)
Prerequisite: CHEM 317 or permission of instructor. Corequisite: CHEM 419. (S)

CHEM 421 Advanced Inorganic Chemistry 3(3-0)
Structure and bonding, coordination theory, periodic relations, equilibrium, kinetics, thermodynamics, descriptive chemistry. Prerequisite: CHEM 321, or permission of instructor. (S)

CHEM 425 Environmental Chemistry 3(3-0)
Chemical process in air, water and soil. Air, water analysis and treatment, pollution. Prerequisite: CHEM 321, or permission of instructor. (*)

CHEM 431 Advanced Physical Chemistry 3(3-0)
Emphasizes latest developments in applied physical chemistry, including advanced theory, and instrumental and computational applications. Prerequisite: CHEM 321 and 322 or permission of instructor. (F/O)

CHEM 460 Forensic Chemistry II 2(2-0)
Investigation of identification techniques for forensic analysis. Topics include arson, biological fluid and drug identification, and DNA analysis. Prerequisite: CHEM 260/L and CHEM 302/L or permission of instructor. Corequisite: CHEM 460L. (F)

CHEM 460L Forensic Chemistry II Lab 2(0-4)
The laboratory will accompany CHEM 460, Forensic Chemistry II lecture. Prerequisite: CHEM 260/L and CHEM 302/L or permission of instructor. Corequisite: CHEM 460. (F)

CHEM 491 Special Topics (1-5 VAR)
Prerequisite: permission of instructor. (*) Repeatable

CHEM 492 Research (1-3 VAR)
Faculty directed research project for undergraduate student. May be repeated for a maximum of 3 credits, total. Prerequisite: approval of department chair. (F,S,SS) Repeatable (3)

CHEM 493 Seminar 1(1-0)
Presentation of a formal presentation on chemical research or a current topic in the chemical literature using software-based delivery methods. May be repeated once. Prerequisite: permission of department chair. (F,S) Repeatable (2)

CHEM 495 Independent Study (1-7 VAR)
Prerequisite: permission of instructor. (*) Repeatable

CHEM 498 Internship (1-6 VAR)
Work experience in the chemistry discipline under the combined supervision of the selected organization and a faculty member. Prerequisite: permission of department chair. (F,S,SS) Repeatable

GRADUATE COURSES

CHEM 501 Advanced Organic Chemistry 3(3-0)
Topics of advanced organic chemistry including organic reactions, mechanisms, natural products, spectroscopy, and industrial applications. Prerequisite: CHEM 302, or permission of instructor. (*)

CHEM 501L Advanced Organic Chemistry Lab 1(0-3)
Molecular structure determination by chemical and instrumental methods. Advanced synthetic techniques. Corequisite or Prerequisite: CHEM 501. (*)

CHEM 503 Polymer Chemistry 3(3-0)
Study of synthetic polymers including synthesis, mechanisms of formation, structure elucidation, reactivity, properties, and industrial application. Biopolymers also will be considered. Prerequisite: CHEM 302, or permission of instructor. (*)

CHEM 510 Foundations in Graduate Studies 3(3-0)
Laboratory safety. Effective sourcing, use, and interpretation of the literature. Scientific methodology, writing, and review of research ethics. Development of a thesis or internship plan. Prerequisite: graduate standing. (F)

CHEM 511 Biochemistry I 3(3-0)
Chemistry of constituents of living matter, including proteins, carbohydrates, nucleic acid and lipids. An introduction to enzymes and coenzymes. Prerequisite: one year undergraduate Organic Chemistry. (F)

CHEM 512 Biochemistry II 3(3-0)
Intermediary metabolism of carbohydrates, lipids and amino acids. Bioenergetics. Prerequisite: CHEM 411 or 511. (S)

CHEM 512L Biochemistry II Lab 2(0-6)
Prerequisite: CHEM 302. Corequisite: CHEM 512. (*)

CHEM 513 Molecular Basis of Disease 3(3-0)
This advanced seminar course explores the molecular nature of disease and engages students in the study of diseases using current topical biochemical literature. Prerequisite: CHEM 411 or 511. (*)

CHEM 519 Instrumental Analysis 3(3-0)
Instrumental techniques in chemical separations, electro-chemistry, atomic, and molecular spectroscopy. Prerequisite: CHEM 317 and 321, or permission of instructor. Co-requisite: CHEM 519L. (S)

CHEM 519L Instrumental Analysis Lab 2(0-6)
Prerequisite: CHEM 317 and 321, or permission of instructor. Corequisite: CHEM 519. (S)

CHEM 520 Health and Safety in the Laboratory 1(1-0)
Review of standard potential hazards encountered in the scientific laboratory including fire, chemical, biological and radiation hazards. Applicable regulations associated with the handling and disposal of hazardous materials and wastes (OSHA, EPA, RCRA, state, "Right to Know," etc.). Sources of information regarding hazards (Material Safety Data Sheets, etc.). Control and prevention of spills and fires. Prerequisite: graduate standing. (F)

CHEM 521 Advanced Inorganic Chemistry 3(3-0)
Structure and bonding, coordination theory, periodic relations, equilibrium, kinetics, thermodynamics, descriptive chemistry, industrial applications. Prerequisite: CHEM 321, or permission of instructor. (S)

CHEM 525 Environmental Chemistry 3(3-0)
Chemical processes in the air, water and soil. Air, water soil analysis and treatment. Special emphasis upon the problems and effects of industrial and other pollution. Prerequisite: CHEM 321, or permission of instructor. (*)

CHEM 529 Advanced Analytical Chemistry 3(3-0)
Emphasizes latest developments in applied analytical chemistry, including advanced theory, wet chemical methods, and the design and application of advanced instrumentation. Prerequisite: CHEM 419/L and CHEM 321, or permission of instructor. (S/E)

CHEM 531 Advanced Physical Chemistry 3(3-0)
Emphasizes latest developments in applied physical chemistry, including advanced theory, and instrumental and computational applications. Prerequisite: CHEM 321 and 322 or permission of instructor. (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 560L. (F)

CHEM 560L Forensic Chemistry II Laboratory 2(0-4)
The laboratory will accompany CHEM 560, Forensic Chemistry II lecture. Prerequisite: CHEM 260/L and CHEM 302/L or permission of instructor. Corequisite: CHEM 560. (F)

CHEM 578 Practicum in Laboratory Instruction 1(0-2)
Laboratory preparation, instruction and methods under the guidance and supervision of an instructor. May be repeated for a maximum of four credits. Prerequisite: graduate standing or approval of department chair. (S/U grading) (F,S,SS) Repeatable (4)

CHEM 588 Internship Seminar 1(1-0)
Graduate internship presentation and examination for completion of MS degree option within the Graduate Programs in Natural Sciences. Prerequisite: graduate standing. (F,S,SS)

CHEM 589 Thesis Defense 1(1-0)
Thesis presentation for completion of MS degree option within the Graduate Programs in Natural Sciences. Prerequisite: graduate standing. (F,S,SS)

CHEM 591 Special Topics (1-4 VAR)
Prerequisite: permission of instructor. (*) Repeatable

CHEM 592 Research (1-6 VAR)
Faculty directed research project for graduate students. Prerequisite: graduate standing and approval of department chair or program director. (S/U grading) (F,S,SS) Repeatable

CHEM 593 Seminar 1(1-0)
An interdisciplinary seminar on topics appropriate to the application of natural sciences. Prerequisite: graduate standing and BIOL/CHEM 510. (*)

CHEM 595 Independent Study (1-4 VAR)
(*) Repeatable

CHEM 598 Graduate Internship (1-4 VAR)
Volunteer or paid work experience under the combined supervision of the selected organization and a faculty member. Prerequisite: graduate standing. (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, multi-threading, 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 on-going 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 on-going 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)

CONSTRUCTION MANAGEMENT (CM)

UNDERGRADUATE COURSES

CM 101 Intro to Construction Management 2(1-2)
Identify and understand the relationships among participants in the construction process and its history. Including risks, construction processes, construction law, regulations and construction project delivery. (F)

CM 231 Statics and Structures 4(4-0)
An introduction to statics, strength of materials, and theory of structures and its applications to building construction. Prerequisite: PHYS 201, 201L and either MATH 122 or MATH 124. (F)

CM 320 Soils in Construction 3(2-2)
A study of soil as a construction material; including investigation, testing, classification, engineering properties and modification techniques, excavations, fills, slope stability, and pavement subgrades. Prerequisite: CM 231. (F)

CM 330 Wood Structural Systems 3(2-2)
A study of production and properties of wood, design methods for wood structural elements and fasteners, and production and erection methods of wood structures. Prerequisite: CM 231. (S)

CM 341 Concrete and Steel Structures 4(3-2)
A study of concrete and steel structures including design elements and construction methods for simple structural systems, joints, connections, fasteners, and concrete formwork. Prerequisite: CM 231. (S)

CM 351 Construction Planning & Scheduling 3(2-2)
Principles and techniques of planning and scheduling for construction projects. Topics include bar charts, Critical Path Method, precedence networks and cost-time takeoffs. Prerequisite: CET 304 or CET 305. (S)

CM 391 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable

CM 445 Construction Safety 2(2-0)
The study of safe construction techniques, workers compensation insurance, OSHA regulations and requirements, cost of accidents, and ethical conduct regarding safety. Prerequisite: CET 207. (S)

CM 451 Mechanical & Electrical Systems 4(4-0)
The study of mechanical and electrical systems associated with building construction: climate control systems, water and waste water systems, electric power and electronic communication systems. Prerequisite: PHYS 201, CET 207. (S)

CM 461 Construction Law 3(3-0)
Legal documents and operation in construction management including business ownership and organization, business development through bidding and negotiations, contracts, communication during construction, insurance and accounting. Prerequisite: CET 303. (F)

CM 465 Construction Accounting & Finance 3(3-0)
Construction project analysis/financial control including, cash flow analysis and management, overhead cost and break even analysis, time value of money, banking, and bonding. Prerequisite: ACCTG 201. (S)

CM 475 Senior Project 3(1-4)
An exercise in construction project analysis, cost estimating, scheduling, and the preparation and professional presentation of a project bid package for an organization. Prerequisite: senior standing in CM; must be within 2 semesters of graduation. (S)

CM 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable

CM 495 Independent Study (1-3 VAR)
Directed study for students interested in a specific area of CM. Prerequisite: junior or senior standing in CM major and permission of instructor. (F,S) Repeatable (2)

CHICANO STUDIES (CS)

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,SS)

CS 136 (HIST 136) The Southwest United States 3(3-0)
This course traces the culture and historical development of the southwestern United States, including cultural contributions of the American Indian and Hispanic peoples. (*)

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 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 341 (WS 341) Chicana Writers 3(3-0)
Survey of Chicana writers from the early 1900's to the present. Along with the literature, aspects of history, sociology and politics will be incorporated. (*)

CS 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. (F,S)

ECON 202 Principles of Microeconomics 3(3-0)
Illustrates how firms make price, wage and profit maximizing decisions. Other topics include market performance, market failure, environmental issues and government intervention. Prerequisite: MATH 109 or MATH 121. (F,S)

ECON 301 Intermediate Macroeconomics 3(3-0)
In-depth study of macroeconomic models including classical, Keynesian, monetarist, new classical and new Keynesian systems. Evaluates applications of monetary and fiscal policies in different models. Prerequisite: ECON 201 and ECON 202. (F)

ECON 302 Intermediate Microeconomics 3(3-0)
In-depth study of microeconomic theories of production and consumption. Emphasis on strategic behavior and decision making under uncertain conditions. Prerequisite: ECON 201 and ECON 202. (S)

ECON 308 Economics for Managers 3(3-0)
Advanced study of economic concepts for managerial decision-making. Topics covered include demand estimation and elasticity, cost estimation, macroeconomic indicators, and the Federal Reserve system. Prerequisite: ECON 201 and ECON 202. (F,S)

ECON 310 Money and Banking 3(3-0)
Topics include behavior of interest rates, money supply process and theory of central banking, determinants of exchange rates and current issues of international financial system. Prerequisite: ECON 201 and ECON 202. (*)

ECON 420 Regional Economic Analysis 3(3-0)
Applies regional economic concepts to real-world projects. Develops skills in accessing a community's trade area, trade relations between communities and sources of local employment growth. Prerequisite: ECON 201 and ECON 202. (*)

ECON 475 International Economics 3(3-0)
International trade and finance theory. Topics include trade protectionism, regional alliances, role of international organizations, economic development, exchange rate determination and balance of payments. Prerequisite: ECON 201 and ECON 202. (*)

ECON 490 Special Projects (1-6 VAR) (*) Repeatable (6)

ECON 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable (6)

ECON 495 Independent Study (1-3 VAR)
Prerequisite: senior standing in School of Business and permission of department chair. (*) Repeatable (6)

ECON 498 Internship (1-6 VAR)
Supervised field work in selected business, social, and governmental organizations; supplemented by written reports. Prerequisite: junior or senior standing in School of Business and permission of internship coordinator. (S/U grading) (*) Repeatable (6)

GRADUATE COURSES

ECON 501 Fundamentals of Economics 1.5(1.5-0)
This class prepares students to understand the market economy and forces that affect prices of goods and services, prices of resources and profit maximizing decisions. Prerequisite: admission to MBA. (*)

ECON 505 Principles of Microeconomics 3(3-0)
Applications oriented approach to understanding the economy including monetary policy, deficits and surpluses, international issues; fundamental differences between liberal and conservative economic policies. (*)

ECON 510 Economics for Managers 3(3-0)
Provides the macro- and micro-economic understanding managers will use throughout their careers. Topics include demand estimation, pricing, decisions under uncertainty, domestic monetary policy, international economics. Prerequisite: admission to MBA or permission of MBA Director. (*)

ECON 591 Special Topics 3(3-0)
Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

ECON 595 Independent Study (1-3 VAR)
Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

EDUCATION (ED)

UNDERGRADUATE COURSES

ED 102 Teaching as a Career 1(1-1)
Orientation to teaching and teacher education. Class sessions and classroom observation required. Not required for teacher certification. (F,S)

ED 202 Foundation of Education 3(3-0)
Historical, philosophical and sociological dimensions of education including legal and financial challenges associated with the institution of education. (F,S,SS)

ED 210 Human Growth and Development for Educators 3(3-0)
Physical, mental, social and emotional growth of the individual; provides teachers with needed perspectives on elementary and secondary school students. (F,S,SS)

ED 280 Educational Media and Technology 3(3-0)
Prepares teachers to use technology for instruction, assessment, management, and research. (F,S,SS)

ED 301 Frameworks of Teaching 3(3-0)
Includes approaches to designing learner-centered classroom communities through applications of standards-based instruction, effective planning and assessment, and classroom management; 30 hours of field experience. Prerequisite: completion of 45 credit hours and 2.6 cumulative GPA. (F,S)

ED 325 Early Field Experience with the Atypical Learner (1-3 VAR)
Development and implementation of principles in teaching atypical learners in a tutorial situation. Prerequisite: admission to Teacher Education Program. (*) Repeatable

ED 380 Integrated Methods in Elementary 3(3-0)
Prepares elementary teachers to integrate the expressive arts and physical education into the elementary curriculum; 30 hours of field experience. Prerequisite: acceptance into the Teacher Education Program. (F,S)

ED 400 Workshop (1-3 VAR)
Designed for special activity-oriented experiences to be conducted in short sessions. Each workshop has a subtitle and no subtitle may be repeated for credit. Prerequisite: acceptance to the Teacher Education Program or permission of instructor. (*) Repeatable

ED 406 Behavioral Support 3(3-0)
Prepares teachers to implement individual, classroom-wide and school-wide behavioral supports and interventions. Field experience required. Prerequisite: admission to Teacher Education. (SS)

ED 407 Levels of Support I 3(3-0)
Prepares teachers to teach students with special needs in inclusive environments, with emphasis on literacy, math, and academic interventions. Requires field experience. Prerequisite: admission to Teacher Education and a beginning reading course. (SS)

ED 408 Levels of Support II 3(3-0)
Addresses effective instruction for secondary students, including transition planning. Requires field experience. Prerequisite: admission to Teacher Education and a beginning reading course. (F)

ED 409 Levels of Support III 3(3-0)
Focuses on instructional programs for K-12 students with severe learning and behavioral challenges. Requires field experience. Prerequisite: admission to Teacher Education and a beginning reading course. (S)

ED 410 Collaboration in Education 3(3-0)
Supports skills at co-teaching, teaming, and collaboration with teachers, families, paraprofessionals, and others to strengthen student achievement. Requires field experience. Prerequisite: admission to Teacher Education and a reading instruction course. (S)

ED 412 Teaching Diverse Learners 3(3-0)
Focuses on legislation for special education, nature of exceptionalities, and meeting the needs of K-12 students, including second language learners; 30 hours field experiences. Prerequisite: acceptance into the Teacher Education Program. (F,S)

ED 413 Teaching Elementary Social Studies 2(2-0)
Methods of teaching social studies in the elementary school. Prerequisite: acceptance into the Teacher Education Program. (F,S)

ED 414 Teaching Elementary Science and Health 2(1.5-1.5)
Methods of teaching health and science in the elementary school. Part of elementary field experience block. Prerequisite: acceptance into the Teacher Education Program. (F,S)

ED 417 Teaching Mathematics in Elementary School 2(1.5-1.5)
Scope and sequence of elementary school mathematics are examined along with instructional methods that address the developmental differences of children; 30 hours of field experiences. Prerequisite: MATH 361 and acceptance into the Teacher Education Program.

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. (F,S)

ED 427 Productivity Tools for Classroom 1(1-0)
Applications of Microsoft Office as a productivity tool, including integration of use in classroom. Field experience required. Prerequisite: ED 280, admission to Education. (F,S)

ED 428 Integration of Educational Software 1(1-0)
Familiarity with and criteria for selecting evaluating, and using quality educational software. Field experience required. Prerequisite: ED 280, admission to Education. (F,S)

ED 429 Literacy & Technology 3(3-0)
Methods for using technology to assess and teach literacy. Prerequisite: ED 280, admission to Education. (F,S)

ED 431 Diverse Learners & Technology 3(3-0)
Strategies for using technology to enhance learning for all students, with emphasis on the relationship between technology and equity. Field experience required. Prerequisite: ED 280, admission to Education. (F,S)

ED 432 Hardware & Networking for Educators 3(3-0)
Pedagogical and practical considerations in using networking and hardware in schools. Prerequisite: ED 280. (SS)

ED 433 Instructional Theory & Tech Design 3(3-0)
Instructional system design theories and models and their adaptation to plan and use technology effectively in the classroom. Field experience required. Prerequisite: ED 280, admission to Education. (F,S)

ED 434 Multimedia Design 3(3-0)
Methods and tools for creating multimedia learning objects for K-12 classrooms. Field experience required. Prerequisite: ED 280, admission to Education. (SS)

ED 435 Classroom Management 3(2-3)
Includes general teaching methods and strategies, learning theories applied to teaching discipline, curriculum educational measurement and evaluation, school organization and school law applicable to classroom teachers. Field experience required. Prerequisite: acceptance into the Teacher Education Program. (F,S)

ED 436 Technology & Assessment Tools 3(3-0)
Prepares teachers to use technology in assessment practices in the classroom. Prerequisite: admission to Teacher Education. (SS)

ED 444 Teaching Secondary Science 4(3-2)
Focuses on teaching methods, materials, and assessment strategies necessary to prepare students to teach in secondary standards-based science classrooms; 60 hours of field experience. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 445 Assessment & Data Driven Instruction 3(3-0)
Prepares teachers to select, administer, and interpret formal and informal assessments to improve instruction. Requires field experience. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 446 Teaching K-12 Art 4(3-2)
Focuses on art curriculum, methods, and assessment to prepare art educators to successfully teach in K-12 standards-based art classrooms; 60 hours of field experience. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 447 Teaching English in Secondary Schools 4(3-2)
Familiarizes students with Colorado foreign language standards, standards-based lesson and unit planning, and authentic assessment; 60 hours of field experiences. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 448 Teaching Foreign Language (K-12) 4(3-2)
Familiarizes students with Colorado foreign language standards, standards-based lesson and unit planning, and authentic assessment; 60 hours of field experiences. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 451 Teaching Secondary Social Studies 4(3-2)
Familiarizes students with the Colorado content standards, including standards-based lesson and unit planning strategies and authentic assessment; 60 hours of field experiences. Prerequisite: acceptance into the Teacher Education Program. (F)

ED 452 Teaching Secondary Business 4(3-2)
Prepares teachers to teach all areas of the business curriculum in secondary schools; 60 hours of field experiences. Prerequisite: admission to Teacher Education. (*)

ED 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)
K-12 level. Application must be submitted on or before date in the *Teacher Education Handbook* prior to the semester in which student teaching will commence. Prerequisite: approved application for student teaching. (F,S)

ED 491 Special Topics (1-3 VAR) (*) Repeatable

ED 494 Field Experience (1,3,5,10 VAR)
Field experience in an educational setting. Not applicable to teacher certification (S/U grading). (*) Repeatable

ED 495 Independent Study (1-3 VAR) (*) Repeatable

GRADUATE COURSES

ED 500 Workshop (.5, 1, 1.5 , 2, 2.5, 3 VAR)
Designed for activity-oriented experiences for teachers. Each has a subtitle; no subtitle may be repeated for credit. Not approved for credit in the M.Ed.. Prerequisite: graduate standing. (S/U grading) (*) Repeatable

ED 501 Professional Development for Tchers
(.5, 1, 1.5, 2, 2.5, 3 VAR)
Professional development for teachers. Each has a subtitle; no subtitle may be repeated for credit. Not approved for credit in the M.Ed. Prerequisite: graduate standing. (F,S,SS) Repeatable

ED 502 Teacher as Change Agent 3(3-0)
Introduces strategies for professional growth including interpretation of research and professional collaboration. Prerequisite: admission to Graduate Program, teaching license. (F,S)

ED 503 Teacher as Researcher 3(3-0)
Develops skills at conducting and applying action research strategies to improve teaching and learning. Prerequisite: admission to Graduate Program, teaching license, ED 502. (F,S)

ED 504 Leading Change in America's Schools 3(3-0)
Builds teachers' skills in leading school change. Prerequisite: admission to Graduate Program, teaching license, ED 502. (F,S)

ED 505 Education Across Cultures 2(2-0)
Analysis of multiculturalism and how the educational process can be adapted to children of diverse cultural backgrounds. Prerequisite: graduate standing. (*)

ED 506 Behavioral Support 3(3-0)
Prepares teachers to implement individual, classroom-wide and school-wide behavioral supports and interventions. Field experience required. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education. (SS)

ED 507 Levels of Support I 3(3-0)
Prepares teachers to teach students with special needs in inclusive environments, with emphasis on literacy, math, and academic interventions. Requires field experience. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education and beginning reading course. (SS)

ED 508 Levels of Support II 3(3-0)
Addresses effective instruction for secondary students, including transition planning. Requires field experience. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education and beginning reading course. (F)

ED 509 Levels of Support III 3(3-0)
Focuses on instructional programs for K-12 students with severe learning and behavioral challenges. Requires field experience. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education. (S)

ED 510 Collaboration in Education 3(3-0)
Supports skills at co-teaching, teaming, and collaboration with teachers, families, paraprofessionals, and others to strengthen student achievement. Requires field experience. Prerequisite: admission to Graduate Program, Teacher in Residency Program, or admission to Teacher Education. (S)

ED 512 Teaching Diverse Learners 3(3-0)
Focuses on legislation for special education, nature of exceptionalities, and meeting the needs of K-12 students, including second language learners; 30 hours field experiences. Prerequisite: graduate standing plus PSYCH 351 or ED 555. (F,S)

ED 514 Teaching K-6 Math 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. (F,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 standards-based art classrooms. Prerequisite: graduate standing. (F)

ED 547 Teaching English in Secondary Schools 3(3-0)
Familiarizes students with Colorado Language Arts Standards, standards-based lesson and unit planning and authentic assessment. Prerequisite: graduate standing. (F)

ED 548 Teaching Foreign Language 3(3-0)
Familiarizes students with Colorado Foreign Language Standards, standards-based lesson and unit planning and authentic assessment. Prerequisite: graduate standing. (F)

ED 550 K-12 Music Methods 3(3-0)
Familiarization with the Colorado Music Content Standards. Standards based lesson and unit planning and strategies for general, instrumental, and vocal music will be emphasized. Prerequisite: graduate standing. (F)

ED 551 Teaching Secondary Social Studies 3(3-0)
Familiarizes students with Colorado Social Studies Content Standards, standards-based lesson and unit planning strategies and authentic assessment. Prerequisite: graduate standing. (F)

ED 552 Teaching Secondary Business 3(3-0)
Prepares teachers to teach all areas of the business curriculum in secondary schools. Prerequisite: admission to Teacher in Residency Program or admission to Teacher Education and graduate standing. (*)

ED 555 Foundations of Learning Disorders 3(3-0)
Exceptionalities: emphasis on high-incidence handicaps. Includes recent legislation and identification, referral, staffing and placement procedures. Major intervention strategies examined. Prerequisite: graduate standing. (*)

ED 560 Professional Development in Curriculum and Instruction (1-3 VAR)
Stresses skill-building in classroom instruction, including curriculum development and student assessment. Current innovations in public education are also addressed. Prerequisite: graduate standing. (*)

ED 570 The Technology Coordinator 3(3-0)
Examination of the roles of the technology coordinator in a K-12 educational setting. Prerequisite: ED 280/520 or completion of a beginning course in instructional technology; completion of a teaching program or instructor approval, graduate standing; completion of ED 532 is strongly recommended. (*)

ED 571 Distance Learning 3(3-0)
Provides information needed to be knowledgeable distance educators and instructional developers for K-12 distance learning. Prerequisite: ED 280/520 or completion of a beginning course in instructional technology; completion of a teaching program or instructor approval, graduate standing. (*)

ED 580 Integrated Methods 3(3-0)
Prepares elementary teachers to teach Social Studies, with emphasis on integration of the expressive arts and PE. Prerequisite: graduate standing. (*)

ED 581 Practicum & Seminar in Education (1-6 VAR)
Supervised practicum and seminar in second teaching or endorsement area. Prerequisite: admission to Education, graduate standing. (F,S,SS) Repeatable

ED 591 Special Topics (1-3 VAR)
Prerequisite: graduate standing. (*) Repeatable

ED 592 Research (1-3 VAR)
Prerequisite: graduate standing and permission of graduate adviser. (*) Repeatable

ED 593 Seminar (1-6 VAR)
Prerequisite: graduate standing. (*) Repeatable

ED 594 Field Experience (1-3 VAR)
Field experience in an educational setting. Prerequisite: graduate standing. (F,S,SS) Repeatable

ED 595 Independent Study (1-3 VAR)
Prerequisite: graduate standing and permission of graduate adviser. (*) Repeatable

ED 599 Thesis Research (1-6 VAR) (*) Repeatable

ELECTRICAL ENGINEERING (EE)

UNDERGRADUATE COURSES

EE 100 Electrical Engineering Fundamentals 3(3-0)
Electrical engineering fundamentals and problem solving using design and visualization tools. (F)

EE 102 Digital Circuit Logic 4(3-2)
Boolean algebra, Karnaugh maps, multiplexers, decoders, ROMs, PLAs, flip-flops, counters, sequential networks, state tables. Prerequisite: High school physics. (S)

EE 201 Circuit Theory 3(2-2)
Basic circuit analysis techniques and applications to engineering design problems. Corequisite: MATH 224, PHYS 222. (F)

EE 202 Circuit Theory Applications 4(3-3)
Step and Sinusoidal Response of networks; modeling of active devices. Prerequisite: EE 201. (S)

EE 251 Introduction to Microprocessors 4(3-3)
Microprocessor organization assembly language, I/O techniques, real time interfaces, applications, hardware/software. Prerequisite: EE 102. (S)

ENGINEERING (EN)

UNDERGRADUATE COURSES

EN 101 Introduction to Engineering 2(2-0)
Introduction to engineering curriculum and careers. Problem solving and creativity. Spreadsheets, word processing and other computer skills. (F)

EN 103 Problem Solving for Engineers 3(2-2)
Writing computer programs to solve real-world problems in engineering and science. Prerequisite: MATH 121. (F,S)

EN 107 Engineering Graphics 2(1-2)
Introduction to the preparation of engineering drawings using freehand sketching and computer graphics software. (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 Materials Science and Engineering 3(3-0)
Fundamentals of chemical structure and atomic bonding, material properties, deformations under force, stress-strain relationships, selection of materials. Prerequisite: EN 211 and high school chemistry. Corequisite: EN 324L. (S)

EN 324L Materials Science and Engineering Lab 1(0-2)
Measurements of material properties and stress-strain relationships. Prerequisite: EN 211. Corequisite: EN 324. (S)

EN 343 Engineering Economy 3(3-0)
Modeling, analysis and decision making involving time value of money, depreciation, income taxes and replacement analysis. Prerequisite: college algebra. (F)

EN 351 Heat Transfer 3(3-0)
Steady and unsteady conduction of heat. Convection heat transfer in boundary layer and duct flows. Forced and free convection. Thermal radiation. Prerequisite: EN 321. (*)

EN 360 Control Systems I 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. (F)

EN 441 Engineering of Manufacturing Processes 3(3-0)
Materials and processes for manufacturing including machining, casting, and forming processes: design, modeling and control. Prerequisite: EN 212. Corequisite: EN 441L. (S)

EN 441L Engineering & Manufacturing Proc Lab 1(0-2)
Corequisite: EN 441. (S)

EN 442 Manufacturing Processes II 3(3-0)
Materials and processes for manufacturing including sheet metal forming, welding, machining and advanced manufacturing processes. Prerequisite: EN 342. (*)

EN 443 Quality Control and Reliability 3(3-0)
Principles and methods of quality control and improvement. Quality management strategy: design and implementation of quality programs in organizations, problem solving techniques, quality improvement tools, etc. Statistical quality control: control charts, process capability evaluation, acceptance sampling procedures, etc. Prerequisite: EN 365. (S)

EN 460 Control Systems II 3(2-2)
Advanced control systems analysis, including microprocessor-based 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 486 Senior Seminar 2(2-0)
Steps in the engineering design process including creativity, technical analysis, and presentations. Prepare for senior project. Prerequisite: permission of instructor. (S/U grading) (F,S)

EN 487 Engineering Design 3(3-0)
Application of engineering principles to a design project. Prerequisite: EN 486. (F,S)

EN 488 Industrial Engineering Design 3(3-0)
Application of engineering principles to a design project. Prerequisite: EN 486. (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 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: EN 440 and graduate standing. (S)

EN 504 Scheduling and Sequencing 3(3-0)
Theory of deterministic scheduling and sequencing with stochastic extensions. An introduction to the complexity of computations in systems varying from single machine to job shop. Prerequisite: EN 571 or permission of instructor. (S)

EN 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, multi-criteria decision analysis, analytical facility location and site selection models. Not every topic offered each year. May be repeated. Prerequisite: Permission of instructor. (S) Repeatable

EN 593 Graduate Seminar 2(2-0)
Seminar for students entering the systems engineering program. Philosophical, methodological and ethical issues in systems engineering are discussed. Prerequisite: Permission of instructor. (S/U grading) (F)

EN 595 Independent Study (1-5 VAR)
Prerequisite: graduate standing. (*) Repeatable

EN 598 Internship (1-6 VAR)
Field work in a company or organization, with written reports. (S/U grading) (*) Repeatable

EN 599 Thesis Research (1-9 VAR)
Preparation of thesis to meet degree requirements. Arranged with major adviser. May be repeated. Prerequisite: graduate standing and adviser approval. (S/U grading) (F,S) Repeatable (6)

ENGLISH (ENG)

UNDERGRADUATE COURSES

ENG 099 Foundational Practices in Writing 3(3-0)
Reading and writing assignments introducing argumentation, analysis, and synthesis. Practice in essay writing stressing thesis construction, organization, and development. Does not count toward graduation. (S/U grading) (F,S)

ENG 100 English as a Second Language (3-12 VAR)
Intensive practice in English Language skills with an emphasis on writing for non-native speakers of English. (*) Repeatable (12)

ENG 101 Composition I 3(3-0)
Emphasis on critical thinking, reading, and writing clear and coherent essays that reflect an understanding of the writing process, rhetorical analysis, argumentation, and academic discourse. Prerequisite: English 099, or ACT verbal score of at least 18, or SAT verbal score of at least 440, or an Accuplacer test score of at least 95. (F,S,SS)

ENG 102 Composition II 3(3-0)
Sequential course providing continued engagement with critical thinking, reading, argumentation, and using rhetorical techniques in academic writing. Emphasis on research strategies. Prerequisite: ENG 101. (F,S,SS)

ENG 106 (ANTHR 106) Language, Thought and Culture 3(3-0)
Cross-cultural introduction to language processes in human society. (*)

ENG 111 Intro to American Academic Discourse 3(3-0)
Practical introduction to American academic discourse and culture for international students, stressing oral and written discussion skills. (*)

ENG 114 Introduction to Creative Writing 3(3-0)
An introduction to poetry, fiction, and creative non-fiction writing, stressing honest and clear writing and heightened critical thinking skills within a workshop setting. (F,S,SS)

ENG 130 Introduction to Literature 3(3-0)
Introduction to the three major literary genres: fiction, poetry, and drama. The main emphasis is on close reading and textual analysis. (*)

ENG 161 Careers for English Majors 1(1-0)
Identifies career options and presents employment opportunities for English majors. (*)

ENG 201 Introduction to Literary Study 3(3-0)
Introduction to literary genres, major periods and writers, close reading and textual analysis, modern literary criticism, and research methods. Prerequisite: ENG 102. (*)

ENG 210 American Literature I 3(3-0)
Literature and literary history of America to 1865. Prerequisite: ENG 102. (*)

ENG 212 American Literature II 3(3-0)
Literature and literary history of America from 1865 to the present. Prerequisite: ENG 102. (*)

ENG 220 (CS 220) Survey of Chicano Literature 3(3-0)
Survey of outstanding contemporary Chicano works. Literature deals with Chicano themes, including analysis of folklore and myth. (*)

ENG 221 Masterpieces of Literature I 3(3-0)
Significant writings in world literature from the ancients through the Renaissance and their backgrounds. Prerequisite: ENG 102. (*)

ENG 222 Masterpieces of Literature II 3(3-0)
Significant writings in world literature from the seventeenth century to the present and their backgrounds. Prerequisite: ENG 102. (*)

ENG 231 Literature of England I 3(3-0)
Literature and literary history of England from the Anglo-Saxon 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 310 Advanced Literary Forms & Genres 3(3-0)
Analyzes published writers, creative writing, and craft through writing based on the study and theory of a specified genre or form. Prerequisite: ENG 201. (*)

ENG 315 Creative Writing: Poetry 3(3-0)
Introduction to writing poetry. A studio workshop for students to grow in their appreciation of poetic processes. Prerequisite: ENG 114. (*)

ENG 316 Creative Writing: Fiction 3(3-0)
Introduction to creating character, situation, and overall structure, emphasis on imaginative and real-life portrayal. Prerequisite: ENG 114. (*)

ENG 317 Creative Nonfiction 3(3-0)
Introduction to writing the reflective essay. Prerequisite: ENG 114. (*)

ENG 318 Creative Writing: Drama 3(3-0)
Introduction to playwriting. Composition of a one-act play and development of creative and critical thinking through the study of major playwrights. Prerequisite: ENG 114. (*)

ENG 319 Professional Editing 3(3-0)
Acquaints students with current practices in editing/publishing. Students will learn to make texts readable and conform to conventions of editing in a variety of disciplines. Prerequisite: ENG 304. (*)

ENG 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 18th-century 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 genre-specific 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 504 Advanced Composition and Rhetoric 3(3-0)
Advanced Composition and Rhetoric is designed to acquaint students with a wide range of classical and contemporary strategies for writing purposeful and persuasive prose. Prerequisite: ENG 101/102. (S/U grading) (S)

ENG 505 Technical and Scientific Report Writing 3(3-0)
Technical and Scientific Report Writing emphasizes professional writing in manuals, proposals, government documents, contracts, and reports. Prerequisite: ENG 101/102. (S/U grading) (S)

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 school-based programs, and career opportunities. A prerequisite for EXHP 344. (F,S)

EXHP 103L Triathlon 1(0-2)
This course is designed to prepare individuals to successfully complete a sprint distance (500 meter swim, 20K bicycle and 5K run or the equivalent) triathlon. (*)

EXHP 104L Personal Fitness 1(0-2)
Students will learn how to evaluate their personal fitness level and develop a comprehensive exercise program beneficial to their overall health and wellness. (*)

EXHP 105L Snow Sports 1(0-2)
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 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,S)

EXHP 112L Rock Climbing 1(0-2)
An introduction to the basic understanding of rock climbing, equipment, Leave No Trace environmental ethics and rock climbing as an outdoor recreational activity. (S)

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)
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 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)
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 117L Backpacking 1(0-2)
An introduction course to instruct the basics of traveling in the backcountry with everything one needs in their backpack. Clothing, equipment, orienteering, first aid, route and campsite selection will be emphasized during the trips that are required for this class. (F)

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 2(1-2)
American Red Cross Lifeguard certification course that prepares successful candidates to be certified in Lifeguarding, First Aid, and CPR. Prerequisite: swimming pre-test. (*)

EXHP 187L Intercollegiate Sports I 2(0-4)
Participation in an intercollegiate sports program. Course registration is limited to freshman competing in a varsity sport program offered by CSU-Pueblo.

EXHP 201 Drugs and Healthy Lifestyles 3(3-0)
An overview of the impact of drug abuse in today's society along with prevention information and treatment programs available. (F)

EXHP 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. (F,S)

EXHP 222 Behavior Facilitation 3(3-0)
Study the influence of social and behavioral systems on health. Emphasis on the fundamentals of self-directed behavior change, health dysfunctions, and stress management. (F,S)

EXHP 233 History and Principles of Physical Education and Recreation 2(2-0)
Study of the history, philosophy and perspectives of physical education and recreation, and their influence upon contemporary American society. (F)

EXHP 243 Methods of Rhythmic Activities 2(2-0)
Fundamentals of folk, square and social dance; emphasis on the teaching techniques involved in basic dance styles and rhythms. (S)

EXHP 245 Motor Learning and Development 3(3-0)
Applied analysis of motor learning and motor development principles and theories throughout the human life span. (S)

EXHP 276L Water Safety Instructor Certification 2(1-2)
Water safety instruction certification may be earned in this course. Prerequisite: EXHP 176L or equivalent swimming experience. (*)

EXHP 287L Intercollegiate Sports II 2(0-4)
Participation in an intercollegiate sports program. Course registration is limited to sophomore student-athletes competing in a varsity sport program offered at CSU-Pueblo.

EXHP 288 Health Promotion Practicum 3(1-4)
Overview of the fundamentals, skills, and professional opportunities in health promotion through the utilization of academic researching, application, theory, and experiential methods. (F)

EXHP 291 Special Topics (1-5 VAR) (F,S) Repeatable

EXHP 336 Community Health 3(2-2)
Introduction to aspects of community and public health, functions of health services at all levels, and exploration of current health problems. Prerequisite: EXHP 101 and EXHP 288. (F)

EXHP 343 Measurement and Evaluation 3(3-0)
Introduction to the use of measurement and research. Emphasis on reviewing and interpreting professional literature, interpreting basic statistics and understanding the concepts underlying successful evaluation. Prerequisite: MATH 121 or permission of instructor. (F,S)

EXHP 344 Exercise Physiology 3(3-0)
Physiologic control of the human body during acute exercise, and adaptations to regular exercise stress. Emphasis on relationships among health, fitness, and exercise. Prerequisite: BIOL 223, 223L, MATH 121, EXHP 343. (F,S)

EXHP 344L Exercise Physiology Lab 1(0-2)
Extension of course lecture which provides practical experience in laboratory experiments which address exercise and exercise theory. Corequisite: EXHP 344. Prerequisite: BIOL 223, 223L, MATH 121, EXHP 343. (F,S)

EXHP 345 Methods of Physical Activities & Games I 2(2-0)
Teaching procedures, skills and techniques of physical activities and games (e.g. adventure education, soccer, basketball, team handball and lacrosse). (F)

EXHP 346 Methods Physical Activities & Games II 2(2-0)
Teaching procedures, skills and techniques of physical activities (e.g. volleyball, football, hockey, track/field and softball). (S)

EXHP 347 Methods of Fitness Instruction 1(1-0)
Emphasis on teaching procedures for lifetime fitness activity (e.g. weight training, aerobics, plyometrics, exercise balls, jump rope, HR monitors, cardio kickboxing, and pedometers). Prerequisite: EXHPR PE K-12 emphasis only. (S)

EXHP 348 Methods of Individual and Dual Sports 3(3-0)
Basic skills and techniques of tennis, racquetball, badminton and golf; emphasis on teaching procedures in these activities. (F)

EXHP 351 Methods of Teaching Elem Physical ED 3(3-0)
Study of effective teaching for elementary children including; maximizing student learning, student and self-assessment, utilization of resources, planning, implementation and revision. 30 hours field experience. Prerequisite: acceptance into Teacher Education Program. Corequisite: EXHP 478. (F)

EXHP 362 Evaluation of Current Health Issues 2(2-0)
Evaluation of current health topics such as human sexuality, violence, environmental and psychoneuroimmunology and their impact on the health of the individual and community. (S)

EXHP 364 Kinesiology 3(3-0)
Integration of fundamentals of anatomical and structural components of human movement with the study of fundamental body movements and the primary muscles involved in those movements. Prerequisite: BIOL 223, 223L. (F,S)

EXHP 382 Lifestyle Disease Risk Reduction 3(3-0)
Overview of principles of epidemiology and lifestyle-disease pathophysiology; examination of use of epidemiologic research to identify risk factors for disease. Prerequisite: BIOL 223, 223L. (S)

EXHP 400 Workshop (1-5 VAR)
Learning experience in physical education offered in large blocks of time not corresponding to the weekly meeting times of the regular course offerings. Prerequisite: approval of program chair. (*) Repeatable

EXHP 432 Applied Sport & Exercise Psychology 3(3-0)
The course is designed to acquaint the student with the direct application of psychological theories and techniques for the enhancement of both sport and exercise. Prerequisite: EXHP 343. PSYCH 205 is strongly recommended. (F)

EXHP 436 Exercise Assessment & 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 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 475 Coaching and Officiating Volleyball 2(2-0)
Techniques and strategy of coaching and officiating volleyball. (*)

EXHP 478 Methods of Teaching Secondary Physical Education 3(2-2)
Study of effective teaching with emphasis on teaching methods, student learning time, classroom management and program planning. 30 hours field experience. Prerequisite: admission to Teacher Education Program. Corequisite: EXHP 351 (F)

EXHP 482 Coaching and Officiating Wrestling 2(2-0)
Techniques and strategy of coaching and officiating wrestling. (*)

EXHP 483 Coaching and Officiating Baseball 2(2-0)
Techniques and strategy of coaching and officiating baseball. (*)

EXHP 484 Coaching and Officiating Soccer 2(2-0)
Techniques and strategies of coaching and officiating soccer. (*)

EXHP 485 Methods in Health Promotion 3(2-2)
Planning, implementation, and evaluation of educational strategies and components of health promotion. Focus on educational methodology and student learning. Prerequisite: EXHP 382 or permission of instructor. (F)

EXHP 487 Health Promotion Program Planning/Evaluation 4(3-2)
Focus on planning, implementing, and evaluating work site health promotion programs. Prerequisite: EXHP 485. (S)

EXHP 491 Special Topics (1-5 VAR)
Permission of instructor. (*) Repeatable

EXHP 492 Research (1-6 VAR)
Research project conducted in collaboration with a faculty member. Prerequisite: approval of a faculty member. (F,S,SS) Repeatable (6)

EXHP 494 Field Experience (1-5 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 self-assessment, 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. (*)

EXHP 592 Research (1-6 VAR)
Graduate level research project conducted in collaboration with a faculty member. Prerequisite: approval of a faculty member. (F,S,SS) Repeatable (6)

FINANCE (FIN)

UNDERGRADUATE COURSES

FIN 330 Principles of Finance 3(3-0)
Principles of finance involved in problems confronting business organizations. Prerequisite: ACCTG 202, ECON 201, ECON 202, BUSAD 265 or MATH 156, and junior standing. (F,S)

FIN 331 Managerial Finance: Policy, Planning and Control 3(3-0)
Financial management, planning, policy formulation and financial decision making. Prerequisite: FIN 330. (*)

FIN 333 Investment Analysis 3(3-0)
Analysis and forecasting of security markets, industry and company studies, portfolio selection and management. Prerequisite FIN 330. (*)

FIN 335 Real Estate Finance 3(3-0)
Principles of real estate financing with emphasis on residential markets, economics, governmental and location factors, financing, and real estate transactions. Prerequisite: FIN 330. (*)

FIN 430 Financial Institutions and Markets 3(3-0)
The role of financial institutions, instruments and markets; structure of interest rates; the Federal Reserve and monetary policy; and the structure, regulation, portfolio and risk management of financial institutions. Prerequisite: FIN 330. (*)

FIN 431 Financial Policy Analysis 3(3-0)
Analysis of financial policies in various organizations. Emphasis on managerial problems in long-range planning, decision making under uncertainty, risk measurement and applications of capital markets. Prerequisite: FIN 330. (*)

FIN 475 International Finance 3(3-0)
Illustrate theories and the current issues of international finance. Topics include the determination of exchange rates, intervention and international monetary systems. Prerequisite: ECON 301 and FIN 330. (*)

FIN 490 Special Projects (1-6 VAR) (*) Repeatable (6)

FIN 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable (6)

FIN 495 Independent Study (1-3 VAR)
Prerequisite: senior standing in School of Business and permission of the department chair. (*) Repeatable (6)

FIN 498 Internship (1-6 VAR)
Supervised field work in selected business, social and governmental organizations; supplemented by written reports. Prerequisite: junior or senior standing in School of Business and permission of internship coordinator. (S/U grading) (*) Repeatable (6)

GRADUATE COURSES

FIN 501 Fundamentals of Finance 1.5(1.5-0)
This class prepares students in basic concepts of managerial finance, including goals, financial analysis, cash flows, time value, risk/return, stocks/bonds, and investment decisions. Prerequisite: admission to MBA. (*)

FIN 505 Principles of Finance 3(3-0)
Principles of finance involved in problems confronting business organizations. Prerequisite: ACCTG 505 or equivalent, ECON 505 or equivalent. (*)

FIN 530 Financial Management 3(3-0)
Theory and application of investment, financing and dividend decisions to maximize stockholder wealth. Use of analytical cases to solve financial problems facing business firms. Prerequisite: admission to MBA or permission of MBA Director. (*)

FIN 575 International Financial Management 3(3-0)
Financial theory and practice as applied to the financial management of multinational corporations. Prerequisite: FIN 530 and admission to MBA or permission of MBA Director. (*)

FIN 591 Special Topics 3(3-0)
Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

FIN 595 Independent Study (1-3 VAR)
Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

FOREIGN LANGUAGE (FL)

UNDERGRADUATE COURSES

FL 100 Introduction to Comparative Linguistics 3(3-0)
Basic concepts in linguistics; comparison of languages. (*)

FL 101 Introduction to a Critical Foreign Language I 3(3-0)
Study of a foreign language not offered regularly. Different languages are offered when enrollment permits. (*) Repeatable

FL 102 Introduction to a Critical Foreign Language II 3(3-0)
Prerequisite: FL 101, or permission of instructor. (*) Repeatable

FL 110 Foreign Language for Travel 1(1-0)
Fundamental vocabulary for basic tourist communication. (*)

FL 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 French I 3(3-0)
Development of skills in speaking, listening, reading, writing, and cultural understanding. (F,S)

FRN 102 Beginning French II 3(3-0)
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: FRN 101 or equivalent. (F,S)

FRN 201 Intermediate French I 3(3-0)
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: FRN 102 or equivalent. (F)

FRN 202 Intermediate French II 3(3-0)
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: FRN 201 or equivalent. (S)

FRN 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 German I 3(3-0)
Development of skills in speaking, listening, reading, writing, and cultural understanding. (F,S)

GER 102 Beginning German II 3(3-0)
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: GER 101 or equivalent. (F,S)

GER 201 Intermediate German I 3(3-0)
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: GER 102 or equivalent. (F)

GER 202 Intermediate German II 3(3-0)
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: GER 201 or equivalent. (S)

GER 301 Advanced German Grammar 3(3-0)
A concentrated study of German grammar in addition to practice in writing, reading, speaking, and listening. Prerequisite: GER 202 or equivalent. (*)

GER 303 Conv and Comp: German 3(3-0)
Focus on improving linguistic proficiency within the context of German culture. Prerequisite: GER 202 or equivalent. (*)

GER 381 German Civilization I 3(3-0)
German geography, culture and history from the beginning to the present. Prerequisite: GER 202 or permission of instructor. (*)

GER 382 German Civilization II 3(3-0)
Prerequisite: GER 202 or permission of instructor. (*)

HISTORY (HIST)

UNDERGRADUATE COURSES

HIST 101 World Civilization to 1100 3(3-0)
Cultural and political growth of civilizations from prehistoric times to 1100; emphasis on the unique contributions of independent cultures to world history. (F,S)

HIST 102 World Civilization From 1100 to 1800 3(3-0)
Cultural and political interaction of civilizations from 1100 to 1800; emphasis on common problems and goals of mankind. (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, full-time 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 city-state 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 full-time 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 full-time 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)

UNDERGRADUATE COURSES

ITL 101 Beginning Italian I 3(3-0)
Development of skills in speaking, listening, reading, writing, and cultural understanding. (F,S)

ITL 102 Beginning Italian II 3(3-0)
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: ITL 101 or equivalent. (F,S)

ITL 201 Intermediate Italian I 3(3-0)
Development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: ITL 102 or equivalent. (F)

ITL 202 Intermediate Italian II 3(3-0)
Continued development of intermediate-level skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: ITL 201 or equivalent. (S)

ITL 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 091 Special Topics (1-4 VAR)
Special topics are offered to students in areas where regular course offerings are not available. Prerequisite: satisfactory placement exam score. This course does not count toward graduation. (S/U grading) (SS) Repeatable

MATH 098 Introductory Algebra 4(4-0)
Review of elementary algebraic operations including factoring and operations with fractions. Introduction to graphing, including graphs of lines. Solutions to linear and quadratic equations. This course does not count toward graduation. Prerequisite: satisfactory placement exam score. (S/U grading). (F,S,SS)

MATH 099 Intermediate Algebra 4(4-0)
A course designed to broaden and deepen algebraic problem-solving skills. Topics include systems of equations, exponents, radicals, complex numbers, quadratic equations, factoring polynomials, function notation and graphs (S/U grading). This course does not count toward graduation. Prerequisite: satisfactory placement exam score or MATH 098 or equivalent. (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 or MATH 099 or equivalent. (F,S,SS)

MATH 121 College Algebra 4(4-0)
Solutions of algebraic equations, graphs of rational functions, exponential and logarithmic functions, systems of equations, matrices, and determinants. Prerequisite: satisfactory placement exam score or MATH 099 or equivalent. (F,S,SS)

MATH 122 College Trigonometry 3(3-0)
Trigonometric and circular functions, identities, inverse functions, vectors, complex numbers. Prerequisite: MATH 121 or equivalent. (*)

MATH 124 Pre-calculus Math 5(5-0)
Polynomial, rational, exponential and logarithmic functions; solution of systems of equations; trigonometric, circular and certain special functions. Prerequisite: satisfactory placement exam score or MATH 121 or equivalent. (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 or 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 or MATH 099 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 two- and 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 or 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 or MATH 121 or equivalent. (F,S)

MATH 224 Calculus and Analytic Geometry II 5(5-0)
Differentiation and integration of trigonometric, logarithmic, and other transcendental functions. Infinite sequences and series, parametric representation of curves, and selected applications. Prerequisite: MATH 126. 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 126 and MATH 207 or equivalent. (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 non-homogenous 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, non-linear 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 and MATH 224. (*)

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. (F,S) Repeatable

MATH 495 Independent Study (1-3 VAR)
Prerequisite: senior standing and permission of instructor. (F,S) Repeatable

MATH 498 Internship (1-6 VAR)
Work experience using the discipline of mathematics under the direction of the selected organization and a faculty member. Prerequisite: junior or senior standing and permission of the department chair. (S/U grading) (F,S,SS) Repeatable

GRADUATE COURSES

MATH 501 Foundations of Mathematics 3(3-0)
Sets, logic, axiomatics, mappings and the various sub-systems 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 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. (S/U grading) (F,S,SS) Repeatable

MATH 599 Thesis Research (1-6 VAR)
Prerequisite: graduate student status. (IP and SU grading) (F,S,SS) Repeatable

MASS COMMUNICATIONS AND CENTER FOR NEW MEDIA (MCCNM)

UNDERGRADUATE COURSES

MCCNM 101 Media and Society 3(3-0)
Survey course that examines the historical, sociological, economic, technological, and ethical foundations of mediated communication from a social scientific perspective. (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. (F,S)

MCCNM 201 Introduction to Journalism 3(3-0)
Instruction in basic journalism concepts including news writing style, news values, the public's right to know, objectivity, fairness and accuracy. Required for majors and minors. Prerequisite: ENG 101 and 102. (F,S)

MCCNM 210 Intro to Integrated Communication 3(3-0)
Fundamental principles of Integrated Marketing Communication, including advertising, public relations, sales promotion, and direct response, as applied to non-profit, government, and for profit organizations. Prerequisite: MCCNM 101. (F,S)

MCCNM 211 Desktop Publishing 3(1-4)
To develop publishing and design skills with varied software packages and within PC and Mac environments, preparing students for publication design and editing careers. (F,S,SS)

MCCNM 220 Introduction to Electronic Media 3(3-0)
The course focuses upon the history, background, and technologies of the electronic media. (F,S)

MCCNM 222 Broadcast News Writing 3(3-0)
Preparation of copy for radio/television news reports, interviews and commentary. (*)

MCCNM 232 Website Design 3(2-2)
Introduction to the creation and design of WWW pages, software applications, protocols and standards for implementing and managing WWW sites. Prerequisite: MCCNM 101. (F,S)

MCCNM 233 Script Writing 3(2-2)
Techniques, styles, formats, treatments, outlines, and scenarios for script forms used in the electronic media are covered with emphasis upon preparing scripts for production. Prerequisite: MCCNM 201. (S)

MCCNM 235 (WS 235) Women and Media 3(3-0)
The historical and cultural implications of the mass media's portrayal of women and the extent of their media participation from colonial to contemporary times. (*)

MCCNM 238 Multimedia Applications 3(2-2)
Introduction to the principles and applications of digital multimedia with special emphasis on animation, digital audio and video as well as interface design. Prerequisite: MCCNM 232. (*)

MCCNM 245 Digital 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 non-fiction formats. Prerequisite: MCCNM 245. (*)

MCCNM 250 Media Lab (1-3 VAR)
A laboratory course for students involved in University publications and campus broadcast operations. May be repeated for up to four credits. Prerequisite: permission of instructor. (*) Repeatable (4)

MCCNM 251 Sports Writing and Statistics 3(2-3)
Study and practical application of sports writing and statistics; emphasis on press box experience at intercollegiate athletic events. Prerequisite: MCCNM 201. (*)

MCCNM 260 Digital Imaging 4(3-2)
A course in applied digital imaging for mass communications print and web publications. Emphasis is on digital image acquisition, enhancement and creative application using computer software. (SS)

MCCNM 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. (*)

MCCNM 301 Editorial Writing 3(3-0)
Study of editorial page management and policy, with emphasis on preparation of editorials, columns and critical reviews. Prerequisite: MCCNM 201. (*)

MCCNM 302 Advertising Writing 3(3-0)
Copy writing essentials and formats for print, broadcast and direct mail advertising. Emphasis on developing writing techniques for practical application in both retail and product advertising. Prerequisite: MCCNM 210 or permission of instructor. (F)

MCCNM 304 Feature Writing 3(3-0)
Reporting on the student experience via seasonal stories, profiles, timeless stories and in-depth articles. Prerequisite: MCCNM 201. (F,S)

MCCNM 305 News Reporting 3(3-0)
Course covers the principles and practices, skills and ethics of professional beat and general assignment news reporting – specifically in-depth interviewing and other news gathering techniques. Prerequisite: MCCNM 201 and 304. (*)

MCCNM 311 Copy Editing 3(3-0)
News evaluation, copy reading, rewriting, headline writing, page makeup and similar duties of the newspaper copy editor. Prerequisite: MCCNM 201. (F)

MCCNM 312 Publication Design 3(3-0)
Basic design principles, photography and art cropping, page makeup and layout, all related to graphic design in publishing. Prerequisite: MCCNM 211. (S)

MCCNM 317 Advertising Strategy 3(3-0)
Seminar emphasizing tactics and strategies of advertising planning, utilizing media techniques, marketing posture and creative media buying. Prerequisite: MCCNM 210. (*)

MCCNM 318 Regulation of Electronic Media 3(3-0)
The historical and legal structures of radio, television, cable, and new technologies of mass communications are explored with emphasis upon inventors, innovation, and social development. Prerequisite: MCCNM 101 and 220. (F,S)

MCCNM 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)

MCCNM 321 Public Relations Case Problems 3(3-0)
Emphasis on analyzing public relations scenarios involving non-profit, private sector and government organizations and their impact on such publics as employees, consumers, voters, and volunteers. Prerequisite: MCCNM 210. (F)

MCCNM 330 (WS 330) Gender and Film 3(3-0)
A discussion course which examines gender roles in theatrical and documentary film while considering the perspective of producers, actors and spectators and salient film theories. Prerequisite: upper division standing in MCCNM or Women's Studies. (*)

MCCNM 332 Advanced Web Design and Development 3(2-2)
Study and implementation of advanced concepts in web design focused on a client-based curriculum that includes graphic design, usability and accessibility, design and architecture. Prerequisite: MCCNM 232 or permission of instructor. (S)

MCCNM 336 Interactive Media 3(3-0)
An overview of interactive media systems and the computer applications used to create interactive media content. Prerequisite: MCCNM 101 and 232. (F)

MCCNM 338 Global Communications 3(3-0)
A discussion of the cross border flow of information and cultural products, emphasis placed on major movements, investors, and global activities involved in international communication. Prerequisite: MCCNM 220. (F,S)

MCCNM 350 Advanced Media Lab (2-3 VAR)
Advanced laboratory courses for media that include the TODAY online and print news operation, advertising, KTSC-FM radio, and KTSC-RMPBS television production. Prerequisite: MCCNM major or minor, junior or senior standing, or permission of instructor. (F,S,SS) Repeatable (9)

MCCNM 370 Non-Profit Organizations and Communication 3(3-0)
A seminar course using cooperative teaching that integrates theory and practice to examine the basic elements of nonprofit organizations from economic, political, and social perspectives. Prerequisite: sophomore standing. (SS)

MCCNM 402 Photojournalism 4(3-2)
Practical course in pictorial reporting; emphasis on spot news feature, picture stories and photographic essays. Prerequisite: MCCNM 260 or permission of instructor. (*)

MCCNM 411 Media Law and Ethics 3(3-0)
Ethical and legal factors of mass communications related to the structure and substance of laws at federal, state and local levels, including freedoms, restraints and contemporary issues. Prerequisite: junior or senior standing. (F,S)

MCCNM 415 Theories of Mass Communications 3(3-0)
Application of information theories to mass communication problems. Nature of the communication process in groups and between mass media and audiences. Contribution of theoretical concepts to solving specific problems. Prerequisite: senior standing or permission of instructor. (*)

MCCNM 422 Writing for Public Relations 3(3-0)
A specialized course in persuasive writing techniques in different formats. Emphasis is on print and electronic news releases, public service announcements, brochures, news-letters, speeches, and proclamations. Prerequisite: MCCNM 201 and 210. (S)

MCCNM 425 Audience Research Methodology 3(3-0)
Generalized research methodology course. Effective and appropriate research tools to define and describe various publics contained within the mass audience. Emphasis on sampling practices, encoding and interpretation of results. Pragmatic task activities via Nielson, Arbitron, SRDS, content analysis and related data sources. (F,S)

MCCNM 430 Integrated Communications Campaigns 3(3-0)
The course examines the organization, structure, components and preparation of an integrated communication campaign focusing on advertising, public relations, sales promotion and direct response. Prerequisite: MCCNM 210. (F)

MCCNM 432 Video Documentary 3(2-2)
Advanced production course about non-fiction formats. The course combines theory, history, and production aesthetics specific to television documentary with opportunity to produce a TV documentary. Prerequisite: MCCNM 245 and 246. (*)

MCCNM 440 (ENG 440) Magazine Writing 3(3-0)
Instruction and practice in writing nonfiction magazine articles, with emphasis on story research and market selection. Prerequisite: MCCNM 201 and 304. (*)

MCCNM 445 Reporting Public Affairs 3(3-0)
Instruction and practice in reporting important issues in areas such as crime, courts, local and state government. Prerequisite: MCCNM 304 and 305. (S)

MCCNM 450 Film Criticism in the Media 3(3-0)
The role and function of the film critic in television and print journalism, with emphasis on writing the critical review. Prerequisite: senior standing. (*)

MCCNM 490 Special Projects 3(0-3)
Individualized instruction within a special interest area, under supervision of a member of the department. Repeatable once. Prerequisite: junior or senior standing, or permission of instructor. (F,S,SS) Repeatable (6)

MCCNM 491 Special Topics (1-3 VAR)
Prerequisite: junior or senior standing, or permission of instructor. (F,S) Repeatable

MCCNM 493 Seminar 3(3-0)
Seminar devoted to special problems in mass media; emphasis on interrelationships of media, understanding media, and the role of criticism. Prerequisite: senior standing. (F,S)

MCCNM 494 Field Experience (3-9 VAR)
A semester-long internship. Student performs the professional duties required by the cooperating commercial mass medium, business or public service agency. May be taken for a maximum of 9 credits. Prerequisite: junior or senior standing, minimum of 30 hours in major, or permission of program chair, 3.0 major GPA. (F,S,SS) Repeatable (9)

MCCNM 495 Independent Study 2(0-2)
Prerequisite: junior or senior standing, or permission of instructor. (F,S)

GRADUATE COURSE

MCCNM 591 Special Topics (1-3 VAR)
Prerequisite: graduate standing. (*)

MECHANICAL ENGINEERING (ME)

UNDERGRADUATE COURSE

ME 250 Computer Applications in Engineering 2(2-0)
Use of digital computers in instrumentation, control, and analysis. Prerequisite: EN 105 and MATH 126. (S)

MANAGEMENT (MGMT)

UNDERGRADUATE COURSES

MGMT 201 Principles of Management 3(3-0)
Managerial process of planning, organizing, leading, decision-making, 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 non-business 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. Prerequisite: MGMT 318 (*)

MGMT 414 Entrepreneurship 3(3-0)
In-depth analysis of the various environment, management, accounting, finance, and legal considerations required for business plan development by an entrepreneur or small business owner. Prerequisite: senior standing, FIN 330, MGMT 311, MKTG 340, or permission of instructor. (*)

MGMT 460 Operations Strategy 3(3-0)
Examination of recent developments in the strategy of operations in the manufacturing and service sectors involving technological policy, new process development, and new product introduction. Prerequisite: MGMT 311. (*)

MGMT 468 Quality Management 3(3-0)
Concepts and techniques of quality improvement processes. Defining quality in customer satisfaction terms and improving quality of products and service through modern techniques. Prerequisite: MGMT 311. (*)

MGMT 475 International Management 3(3-0)
An analysis of management opportunities and challenges in the global environment and the evaluation and formulation of strategies of firms operating and expanding internationally. Prerequisite: MGMT 301 and 311. (F,S,SS)

MGMT 485 Strategic Management 3(3-0)
Integration of the business core disciplines to explore ways that strategy is formed in contemporary business organizations. Case method used extensively. Prerequisite: senior standing in the School of Business and completion of the Business Core. BUSAD 493 may be taken concurrently. (F,S,SS)

MGMT 490 Special Projects (1-6 VAR)
(*) Repeatable (6)

MGMT 491 Special Topics (1-3 VAR)
Prerequisite: permission of instructor. (*) Repeatable (6)

MGMT 495 Independent Study (1-3 VAR)
Prerequisite: senior standing in School of Business and permission of department chair. (*) Repeatable (6)

MGMT 498 Internship (1-6 VAR)
Supervised field work in selected business, social and governmental organizations; supplemented by written reports. (S/U grading) Prerequisite: junior or senior standing in School of Business and permission of internship coordinator. (*) Repeatable (6)

GRADUATE COURSES

MGMT 501 Fundamentals of Management 3(3-0)
This class familiarizes students with the managerial process and multiple specific topics related to the managerial function. Prerequisite: admission to MBA. (*)

MGMT 505 Principles of Management 3(3-0)
Managerial process of planning, organizing, leading, decision-making, and controlling. Modern management techniques will be emphasized. (*)

MGMT 511 Production/Operations Management 3(3-0)
Managerial perspective of operations functions, under-standing of analytical tools to solve operations problems, applied operations issues, and develop decision-making skills. Prerequisite: admission to MBA or permission of MBA Director. (*)

MGMT 520 Management of Organizational Behavior 3(3-0)
Ideas and concepts for increasing effectiveness in organizations. Major topics include personality, motivation, leadership, communication, group dynamics, change and conflict, and contingencies of work unit design. Prerequisite: admission to MBA or permission of MBA Director. (*)

MGMT 521 Theories of Organizational Design 3(3-0)
Identification of external environments faced by organizations and theories of organizational design that enable organizations to operate more effectively within their respective environments. Prerequisite: admission to MBA or permission of MBA Director. (*)

MGMT 565 Management Information Systems 3(3-0)
Principles, methodologies, practices and management of information systems in business organizations, topics include: IT strategy, IT project management, e-commerce, and enterprise information systems. Prerequisite: admission to MBA or permission of MBA Director. (*)

MGMT 575 International Management 3(3-0)
An advanced analysis of management opportunities and challenges in the global environment and the evaluation and formulation of strategies of firms operating and expanding internationally. Prerequisite: MGMT 520 and BUSAD 502. (F,S,SS)

MGMT 585 Management Policy and Strategy 3(3-0)
Critical analysis of the policy/strategy field. This course integrates the business core disciplines to explore ways that strategy is formed in contemporary business organizations. Case Method used extensively. Prerequisite: admission to MBA or permission of MBA Director and completion of core courses. (*)

MGMT 591 Special Topics 3(3-0) (*) Repeatable (6)

MGMT 595 Independent Study (1-3 VAR)
Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (*) Repeatable (6)

MARKETING (MKTG)

UNDERGRADUATE COURSES

MKTG 340 Principles of Marketing 3(3-0)
Analytical survey of problems encountered in distributing goods and services from a marketing-management approach with emphasis on the role of the consumer and the social responsibility of the marketer. Prerequisite: junior standing. (F,S)

MKTG 341 Sales Force Management 3(3-0)
Managing a sales force including recruiting, selection, training, compensation, supervision, stimulation and sales planning. Computer simulation used to do forecasting, budgeting, territory allocation, sales analysis and control. Prerequisite: MKTG 340. (*)

MKTG 342 Promotional Strategy 3(3-0)
Principles, concepts and problems involved in development and management of advertising, personal selling, public relations and sales promotion programs, activities in the global economy. Prerequisite: MKTG 340. (*)

MKTG 345 Retail Management 3(3-0)
Issues in buying, maintaining inventory, displaying, designing store layouts, promoting, providing services and general merchandising of products for improving retail profitability. Prerequisite: MKTG 340. (*)

MKTG 348 Consumer Behavior 3(3-0)
Survey of contributions of behavioral sciences to understanding and prediction of consumer behavior in the decision-making process. Prerequisite: MKTG 340. (*)

MKTG 440 Marketing Research 3(3-0)
Fundamental techniques. Practical experience in research methodology: planning an investigation, questionnaires, sampling, interpretation of results, report preparation. Prerequisite: MKTG 340 and BUSAD 265. (*)

MKTG 441 Marketing Strategies 3(3-0)
Detailed consideration of process of formulating and implementing strategies in marketing. Major emphasis on markets, channels of distribution, and product analysis. Prerequisite: MKTG 340, and either MKTG 440 or BUSAD 360. (*)

MKTG 475 International Marketing 3(3-0)
Effects of culture, political and legal structures on marketing. Planning for international products, services, promotion, pricing, distribution and impact of trade groups. Prerequisite: MKTG 340. (*)

MKTG 490 Special Projects (1-6 VAR)
Prerequisite: MKTG 340 and permission of instructor. (*) Repeatable (6)

MKTG 491 Special Topics (1-3 VAR)
Prerequisite: MKTG 340 and permission of instructor. (*) Repeatable (6)

MKTG 495 Independent Study (1-3 VAR)
Prerequisite: MKTG 340 and permission of instructor. (*) Repeatable (6)

MKTG 498 Internship (1-6 VAR)
Supervised field work in selected business, social and governmental organizations; supplemented by written reports. (S/U grading) Prerequisite: MKTG 340, junior or senior standing in School of Business, and permission of internship coordinator. (*) Repeatable (6)

GRADUATE COURSES

MKTG 501 Fundamentals of Marketing 1.5(1.5-0)
This class prepares students in the conception, promotion, pricing and distribution of ideas, goods, and services from a marketing perspective. Prerequisite: admission to MBA. (*)

MKTG 505 Principles of Marketing 3(3-0)
Analytical survey of problems encountered in distributing goods and services from a marketing-management approach with emphasis on the role of the consumer and the social responsibility of the marketer. (*)

MKTG 540 Marketing Management 3(3-0)
Emphasizes an understanding of market behavior, coordination and implementation of the marketing mix with other managerial decisions, and the integration of theory through use of cases. Prerequisite: admission to MBA or permission of MBA Director. (*)

MKTG 575 International Marketing 3(3-0)
An advanced analysis of marketing opportunities and challenges in the global environment and the evaluation and formulation of strategies of firms operating and expanding internationally. Prerequisite: MKTG 540. (F,S,SS)

MKTG 591 Special Topics 3(3-0) (*) Repeatable (6)

MKTG 595 Independent Study (1-3 VAR)
Individual study of a subject determined by the instructor and student with permission of the director. Prerequisite: admission to MBA or permission of MBA Director. (F,S,SS) Repeatable (6)

MILITARY SCIENCE AND LEADERSHIP (MSL)

UNDERGRADUATE COURSES

MSL 101 Leadership and Personal Development 1(1-0)
Introduces students to the personal challenges and competencies that are critical for effective leadership. Students learn skills that relate to leadership, officership and the Army. Field work required once a week. (F)

MSL 102 Introduction to Tactical Leadership 1(1-0)
Provides an overview of leadership fundamentals such as problem solving, listening skills and writing. Students explore dimensions of leadership in the context of classroom instruction and practical exercises. Field work required once a week. (S)

MSL 201 Innovative Team Leadership 2(2-0)
Explores the dimensions of creative tactical leadership strategies and styles by examining team dynamics and leadership theories. Students practice team building exercises during leadership labs. Field work required once a week. (F)

MSL 202 Foundations of Tactical Leadership 2(2-0)
Examines the challenges of leading tactical teams in the contemporary operating environment (COE). Highlights terrain analysis, operation orders and adaptive leadership. Field work required once a week. (S)

MSL 301 Adaptive Tactical Leadership 3(3-0)
Challenges students to study, practice and evaluate adaptive leadership skills in scenarios related to squad tactical operations. Students receive specific feedback on their leadership skills. Field work required once a week and physical training required three times per week. Prerequisite: ROTC Basic Course Credit. (F)

MSL 302 Leadership in Changing Environments 3(3-0)
Employs increasing leadership challenges to build skills in leading tactical operations at the platoon level. Students learn basics of stability operations and conduct military briefings. Field work required once a week. Physical training required three times/week. Prerequisite: ROTC Basic Course Credit. (S)

MSL 303 Advanced Camp 6(0-12)
Students are assigned to a unit, placed in leadership positions, and evaluated on how they work in that unit. Mandatory for Advanced Course ROTC students. Prerequisite: MSL 301 and MSL 302. (SS)

MSL 401 Developing Adaptive Leaders 3(2-2)
Develops proficiency in planning, executing and assessing complex operations by functioning as a staff; includes basics of risk management, ethical decision-making and military justice. Field work required once a week. Physical training required three times per week. Prerequisite: ROTC Basic Course Credit. (F)

MSL 402 Leadership in a Complex World 3(2-2)
Explores the dynamics of leading in complex situations of the current operating environment (COE). Includes advanced instruction in law of war and interaction with non-governmental 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 Orchestra I 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra. Additional rehearsals and activities are required. (Level I). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 150 Music Theory I 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 non-music 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) (163-Bass) (164-Flute) (165-Oboe) (166-Bassoon) (167-Clarinet) (168-Saxophone) (169-Voice) (170-Trumpet) (171-French Horn) (172-Trombone) (173-Euphonium) (174-Tuba) (175-Percussion) (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 229 Piano Proficiency Completion 1(0-1)
One-half hour private lesson per week in which to complete the preparation for and take the Piano Proficiency Exam. Prerequisite: successful completion of MUS 127 and 227, or permission of the instructor. (F,S)

MUS 230 Marching Band 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 (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 1(0-2)
Instruction in the fundamentals of woodwind instruments from a pedagogical approach, enabling students to effectively teach beginners. Primarily intended for students in Music Education. (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. (F,S)

MUS 244 Orchestra II 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra. Additional rehearsals and activities are required. (Level II). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 250 Music Theory III 3(3-0)
A continuation of MUS 210. Applications of chromatic and altered harmonies of the Romantic, post-Romantic and pre-modern 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) (262-Cello) (263-Bass) (264-Flute) (265-Oboe) (266-Bassoon) (267-Clarinet) (268-Saxophone) (269-Voice) (270-Trumpet) (271-French Horn) (272-Trombone) (273-Euphonium) (274-Tuba) (275-Percussion) (276-Piano) (277-Organ) (278-Classical 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 285 Cultural History of Popular Music 3(3-0)
A survey of the various styles of American popular music from approximately 1900 to the present including folk music, ragtime, blues, jazz, and rock. (F,S)

MUS 291 Special Topics (1-3 VAR) (*) Repeatable

MUS 301 Music Performance Symposium III (0, 1 VAR)
Level three course in observation and critique of music performances; includes lectures, clinics, demonstrations, and performance preparation. Weekly critiques required for credit. Prerequisite: MUS 201. (F,S) Repeatable (2)

MUS 302 Concert Choir III 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the choral ensemble. Additional rehearsals and performances are required. (Level III). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 303 Music and Computer Technology II 1(0-2)
Continued study in the use of computer technology in music, including digital audio, MIDI, composing, sequencing, performing, and printing, utilizing various software applications. Prerequisite: MUS 103. (F,S)

MUS 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 326 Guitar Pedagogy I: Adv Sightreading 2(0-2)
Focus on advanced knowledge of the fretboard, harmony, sightreading, and arranging for guitar. Prerequisite: successful completion of junior qualifying exam, or consent of the instructor. (*)

MUS 327 Guitar Pedagogy II: History & Lit 2(0-2)
Focus on evolution of guitar notation and representative repertoire of each historical period. Prerequisite: successful completion of junior qualifying exam, or consent of the instructor. (*)

MUS 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. (F,S) Repeatable (2)

MUS 344 Orchestra III 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra. Additional rehearsals and activities are required. (Level III). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 346 Piano Literature 2(2-0)
Survey of piano literature from the 18th-century to the present. (*)

MUS 347 Piano Pedagogy 2(2-0)
Introduction to the practices in teaching private and class piano. (*)

MUS 350 Theory V-Composition and Analysis 3(3-0)
Analysis and application of compositional techniques in music from all style periods, including form, harmony, and style. Prerequisite: successful completion of MUS 280. (*)

MUS 354 Jazz Ensemble III 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the jazz ensemble. Additional rehearsals and performances are required. (Level III). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 355 Music History II 3(3-0)
An in-depth study of music history and representative literature from the Classical period to the present. Prerequisite: successful completion of MUS 305. (S)

MUS 357 Orchestration and Arranging 3(3-0)
Instruction and application in techniques of scoring music for various combinations of musical mediums. Includes scoring for strings, woodwinds, brasses, percussion, and voices. Prerequisite: successful completion of MUS 150, 151, 210, 211, 250, 251, 280, 281. (F)

MUS 358 Basic Conducting 2(2-0)
Instruction in the conducting of music, with an emphasis on building basic skills and techniques. Prerequisite: successful completion of MUS 150, 151, 210, 211, 250, 251, 280, 281, 357. (S)

MUS 359 Advanced Conducting 2(0-1)
Continuing instruction in the conducting of music in the student's choice of emphasis areas. Individualized instruction in the form of one private lesson per week. Prerequisite: successful completion of MUS 358. (F)

MUS 360-379 Applied Music, Major 2(0-1)
In-depth applied study in various performance areas for the Junior music major. Prerequisite: admission to upper-class status; declared music major, permission of instructor. (F,S)—(360-Violin) (361-Viola) (362-Cello) (363-Bass) (364-Flute) (365-Oboe) (366-Bassoon) (367-Clarinet) (368-Saxophone) (369-Voice) (370-Trumpet) (371-French Horn) (372-Trombone) (373-Euphonium) (374-Tuba) (375-Percussion) (376-Piano) (377-Organ) (378-Classical Guitar) (379-non-Classical 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) (383-Bass) (384-Flute) (385-Oboe) (386-Bassoon) (387-Clarinet) (388-Saxophone) (389-Voice) (390-Trumpet) (391-French Horn) (392-Trombone) (393 Euphonium) (394-Tuba) (395-Percussion) (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 Orchestra IV 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the full orchestra. Additional rehearsals and activities are required. (Level IV). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 445-449 Applied Music, Major 2(0-1)
In-depth applied study in various performance areas for the Senior music major. Prerequisite: admission to upper-class status; declared music major, permission of instructor. (F,S)—(445-Violin) (446-Viola) (447-Cello) (448-Bass) (449-Flute). Repeatable (4)

MUS 454 Jazz Ensemble IV 1(0-2.5)
Rehearsal, study, and public performance of selected appropriate literature for the jazz ensemble. Additional rehearsals and performances are required. (Level IV). Prerequisite: permission of instructor. (F,S) Repeatable (2)

MUS 455-459 Applied Music, Major 2(0-1)
In-depth applied study in various performance areas for the Senior music major. Prerequisite: admission to upper-class status; declared music major, permission of instructor. (F,S)—(455-Oboe) (456-Bassoon) (457-Clarinet) (458-Saxophone) (459-Voice). Repeatable (4)

MUS 460-469 Applied Music, Major 2(0-1)
In-depth applied study in various performance areas for the Senior music major. Prerequisite: admission to upper-class status; declared music major, permission of instructor. (F,S)—(460-Trumpet) (461-French Horn) (462-Trombone) (463-Euphonium) (464-Tuba) (465-Percussion) (466-Piano) (467-Organ) (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) (473-Bass) (474-Flute) (475-Oboe) (476-Bassoon) (477-Clarinet) (478-Saxophone) (479-Voice) (480-Trumpet) (481-French Horn) (482-Trombone) (483-Euphonium) (484-Tuba) (485-Percussions) (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 513 Advanced Vocal Pedagogy 1(0-1)
Designed for the experienced vocal music teacher who seeks graduate-level pedagogical techniques to better guide and develop the adolescent voice. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 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 533 Advanced String Pedagogy 1(0-1)
This course expands upon the basics of string pedagogy and literature. Includes discussion of problems and possible solutions in student playing techniques. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (*)

MUS 540 Kodály Method for Elementary Music 3(3-0)
Graduate study in teaching music to young children. Students will create teaching aids and increase their own solfege proficiency. Primarily for teachers of general music. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 543 Advanced Woodwind Pedagogy 1(0-1)
Designed for the experienced instrumental music teacher who seeks advanced techniques in the teaching and playing of woodwind instruments. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 545 Current Issues in Music Education 3(3-0)
History and philosophy of music education in public schools, with readings, discussions, and practical applications of content standards in instruction and assessment. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 550 Instrumental Conducting 3(3-0)
Graduate level instruction in instrumental conducting in a pedagogical setting with emphasis on selection of appropriate literature as well as technique. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 553 Advanced Brass Pedagogy 1(0-1)
Designed for the experienced instrumental music teacher who seeks graduate-level pedagogical techniques to improve students' achievement in playing instruments of the brass family. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 559 Advanced Music Analysis 3(3-0)
Analytical study of selected varied compositions, primarily from the perspective of a school ensemble conductor. Includes instructional strategies and criteria for selecting appropriate quality literature. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS)

MUS 560 Choral Conducting 3(3-0)
Graduate level instruction in choral conducting in a pedagogical setting with emphasis on selection of appropriate literature as well as technique. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (SS*)

MUS 565 Methods of Research in Music ED 3(3-0)
This course provides a broad foundation in research design and methodologies for graduate students in music education. Quantitative and qualitative analytical procedures are introduced. Prerequisite: bachelor's degree and teaching certificate, or approval of the Music Department Chair. (*)

MUS 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,SS)

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,SS)

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. (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. (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. (S/U grading) (F,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. (S/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 408 Synthesis of Pharmacologic Concepts 2(2-0)
Pharmacological concepts and prototype agents with focus on the physiological action, effect and utilization of selected drug groups in nursing practice. Prerequisite: completion of all required 200/300 level nursing courses. (S)

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 431 Gerontological Nursing 3(3-0)
Theory for nursing care of older adults. The promotion of healthy aging through utilization of the nursing process is emphasized. Prerequisite: successful completion of junior level nursing courses or RN status or by permission. (*)

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. (*)

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 510 Small Office Procedures 1(1-0)
Examines the theoretical and practical components of small office procedures within the scope of advanced practice nursing. Prerequisite: admission to Graduate Nursing Program or permission. (F)

NSG 511 Orthopedics Procedures 1(1-0)
Examines the theoretical and practical components of orthopedic procedures and associated basic x-ray interpretation within the scope of advanced practice nursing. Prerequisite: admission to Graduate Nursing Program or permission. (F)

NSG 512 Cardiovascular Management 1(1-0)
Examines the theoretical and practical components of cardiac electrocardiograms with connection to advanced coronary syndrome, peripheral vascular disease and simulation as a provider. Prerequisite: admission to Graduate Nursing Program or permission. (F)

NSG 513 Pulmonary Evaluation and Management 1(1-0)
Examines the theoretical/practical components of pulmonary evaluation/management including advanced airway management and insertion of central lines within the scope of advanced practice nursing. Prerequisite: admission to Graduate Nursing Program or permission. (S)

NSG 514 Women's Health & Pre/Post Natal Care 2(2-0)
Examines the theoretical and practical components women's health and pre/post natal care within the scope of advance practice nursing. Prerequisite: admission to Graduate Nursing Program or permission. (S)

NSG 520 Theoretical Mental Health Models 3(3-0)
Provides review of theories and conceptual models which frame psychological interventions. Classical personality theories and contemporary models for treatment for individuals with mental health issues. Prerequisite: admission to the Graduate Nursing Program or permission of the course instructor. (S)

NSG 521 Advanced Psychopharmacology 1(1-0)
This one semester hour course prepares the advanced psychiatric clinical practitioner for drug therapy management in the diagnosis and treatment of mental health clients. Prerequisite: admission to the Graduate Nursing Program or permission of the course instructor. (F)

NSG 522 Psychiatric Evaluation of Adults 1(1-0)
Overview of history taking, physical finding, and the psychiatric interview in planning care for the adult psychiatric patient. Prerequisite: admission to the Graduate Nursing Program or permission of the course instructor. (SS)

NSG 523 Psychological Assessment of Adults 1(1-0)
Course includes psychological assessment of the adult; components of the mental status examination. Includes review of psychological tests commonly used for diagnosis of adults. Prerequisite: admission to the Graduate Nursing Program or permission of the course instructor. (SS)

NSG 524 Psychiatric Differential Diagnosis 2(2-0)
Course provides review of categorical classification of mental disorders in adults with defining features. Diagnostic criteria are presented as a basis for diagnosis and treatment. Prerequisite: admission to the Graduate Nursing Program or permission of the course instructor. (F)

NSG 550 Health Policy & Finance 3(3-0)
Analyze and utilize the historical, political, economic, and financial concepts in the development of one's practice and the advanced practice role. Prerequisite: admission to Graduate Nursing Program or by permission. (SS)

NSG 551 Health 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 2(2-0)
Data collection, organization, recording, physical and psychosocial assessment and communication of data, reflecting the health status of the client. Prerequisite: admission to Graduate Nursing Program or by permission. Corequisite: NSG 562L. (F)

NSG 562L Advanced Assessment Lab 1(0-4)
Practical lab for data collection, organization, recording, physical and psychosocial assessment and communication of data, reflecting the health status of the client. (60 hours). Corequisite: NSG 562. (S/U Grading) (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 4(4-0)
Synthesizes theory into practice, based on psychiatric mental health competencies and advanced practice clinical requirements. Prerequisite: completion of all core courses. Two years (4000 hours) RN clinical practice in psych mental health. Corequisite: NSG 581L. (S)

NSG 581L Synthesis Psych Mental Health I Lab 4(0-16)
Practical clinical role for the Nurse Practitioner based on psychiatric mental health competencies and advanced practice clinical requirements (240 hours). Corequisite: NSG 581. (S/U grading) (S)

NSG 582 Synthesis: Psych Mental Health NSG II 4(4-0)
Synthesizes theory into practice, based on psychiatric mental health advanced practice nurse's competencies and clinical requirements. Prerequisite: NSG 581. Corequisite: NSG 582L. (SS)

NSG 582L Synthesis Psych Mental Health II Lab 4(0-16)
Practical clinical role for the Nurse Practitioner based on psychiatric mental health competencies and advanced practice clinical requirements (240 hours). Corequisite: NSG 582. (S/U grading) (SS)

NSG 583 Synthesis Experience: Educator 3(3-0)
Synthesizes theory into practice, based on the nurse educator competencies. Prerequisite: completion of all core courses, NSG 551. Two years (4000 hours) RN clinical practice. Corequisite: NSG 583L. (S)

NSG 583L Synthesis Experience: Educator Lab 6(0-24)
Practical application of synthesizes based on nurse educator competencies and advanced practice practicum requirements (360 hours). Corequisite: NSG 583. (S/U grading) (S)

NSG 585 Acute/Chron/Emer Health Needs I 4(4-0)
Role of the Nurse Practitioner in the diagnosis and management of client's needs in fluid and electrolytes, cardiovascular-respiratory, nephrology-dialysis, transplants, GI/GU, endocrinology, nutrition, and genetics. Prerequisite: completion of all core graduate nursing courses and two years (4000 hours) RN acute clinical practice within last five years. Corequisite: NSG 585L. (S)

NSG 585L Acute/Chron/Emer Health Needs I Lab 4(0-16)
Practical clinical for the Nurse Practitioner's roles in the diagnosis and management of client's needs for NSG 585 (240 clinical hours). Corequisite: NSG 585. (S/U grading) (S)

NSG 586 Acute/Chron/Emer Health Needs II 4(4-0)
Role of the Nurse Practitioner in the diagnosis and management of client's needs for neuro-trauma, oto-ophthalmology, oncology, women/men's health, orthopedics, immunology, palliation, gerontology. Prerequisite: completion of all core graduate nursing courses and two years (4000 hours) RN acute care clinical practice within last five years. Corequisite: NSG 586. (SS)

NSG 586L Acute/Chron/Emer Health Needs II Lab 4(0-16)
Practical clinical for the Nurse Practitioner's roles in the diagnosis and management of client's needs for NSG 586 (240 clinical hours). Corequisite: NSG 586. (S/U grading) (SS)

NSG 587 Synthesis Experience 9(3-24)
Synthesizes theory into practice based on specialty competencies and advanced practice clinical requirements. This course may need to be repeated based on specialization. Prerequisite: completion of all core graduate nursing courses or by permission. (F,S,SS)

NSG 588 Family Synthesis I 2(2-0)
Introduction to family synthesis based on the family nurse practitioner competencies and advanced practice clinical requirements towards the childbearing family. Prerequisite: completion of all core graduate nursing courses and specialization plan approved by Graduate Faculty Committee. Corequisite: NSG 588L. (S)

NSG 588L Family Synthesis I Lab 2(0-8)
Role of the practitioner in the management to family synthesis based on the family nurse practitioner competencies for the childbearing family (120 clinical hours). Corequisite: NSG 588. (S/U grading) (S)

NSG 589 Family Synthesis II 3(3-0)
Synthesis theory into practice, based on the family nurse practitioner competencies. Prerequisite: completion of all core graduate nursing courses and specialization plan approved by Graduate Faculty Committee, NSG 588. Corequisite: NSG 589L. (F)

NSG 589L Family Synthesis II Lab 6(0-24)
Practical clinical for the Nurse Practitioner's roles in the diagnosis and management of client's needs based on the family nurse practitioner competencies (360 hours). Corequisite: NSG 589. (S/U grading) (F)

NSG 590 Special Projects (1-3 VAR)
Individual project selected, outlined and pursued by student. Prerequisite: graduate standing and advisor approval. (S/U grading) (*) Repeatable

NSG 591 Special Topics (1-6 VAR) (*) Repeatable (6)

NSG 592 Research 3(3-0)
Focuses on research methods needed for investigation and expansion of nursing knowledge. Appraisal and analysis of research and development of a proposal will be covered. Prerequisite: undergraduate statistics course; admission to the Graduate Nursing Program or by permission. (S)

NSG 593 Thesis/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

NSG 600 Vulnerable Population Residency 1   6(0-40)
This residency is for the post master's student wishing to develop their skills in primary care with vulnerable populations (600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner. (S/U grading) (S)

NSG 601 Vulnerable Population Residency 2   6(0-40)
Continuation of NSG 600 for the post master's student wishing to develop their skills in primary care with vulnerable populations (600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner; NSG 600. (S/U grading) (SS)

NSG 602 Vulnerable Population Residency 3   6(0-40)
Continuation of NSG 601 for the post master's student wishing to develop their skills in primary care with vulnerable populations (600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner; NSG 600, 601. (S/U grading) (F)

NSG 603 Vulnerable Population Fellowship 1   6(0-40)
Advanced training for the post resident student wishing to develop mastery with their skills in primary care with vulnerable populations (600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner; Residency Program NSG 600, 601, 602. (S/U grading) (S)

NSG 604 Vulnerable Population Fellowship 2   6(0-40)
Continuation of advanced training for the post resident student wishing to develop their skills in primary care with vulnerable populations (600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner; NSG 603. (S/U grading) (SS)

NSG 605 Vulnerable Population Fellowship 3   6(0-40)
Continuation of advanced training for the post resident student wishing to develop their skills in primary care with vulnerable populations (600 clinical hours). Prerequisite: Board Certification as a Family Nurse Practitioner; NSG 604. (S/U grading) (F)

PHILOSOPHY (PHIL)

UNDERGRADUATE COURSES

PHIL 102 Philosophical Literature 3(3-0)
Philosophical literature that focuses on such questions as what is the nature of reality, how do we know what we know, and for what kind of life should we strive. (F,S)

PHIL 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. (F,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. (F, 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. (S, O) Repeatable (2)

PHYS 495 Independent Study (1-2 VAR)
Prerequisite: junior or senior standing; permission of department chair. (*) Repeatable

PHYS 498 Internship (1-6 VAR)
Work experience using the discipline of physics under the direction of the selected organization and a faculty member. Prerequisite: junior or senior standing and permission of the department chair.(S/U grading) (*) Repeatable

PHYS 499 Thesis Research 1(1-0)
Students write a research paper describing their own research. Prerequisite: senior standing in the department. (F,S) Repeatable

POLITICAL SCIENCE (POLSC)

UNDERGRADUATE COURSES

POLSC 101 American National Politics 3(3-0)
Basic processes in American politics. Principles and structure of national governments. (*)

POLSC 102 State and Local Government and Politics (3-0)
Behavioral aspects, government organization and inter-relationships of state and local politics, relations with federal government and other states. Special attention to Colorado government. (S)

POLSC 105 (PSYCH, SOC, WS 105) Understanding Human Diversity 3(3-0)
Americans live in a complex and diverse society. This course examines the nature, impact and strategies for dealing with diversity in personal and social contexts. (*)

POLSC 106 Minority Politics in America 3(3-0)
An overview of the historical and contemporary struggles for empowerment by groups traditionally excluded from full societal participation because of racial designation. (*)

POLSC 200 Understanding Human Conflict 3(3-0)
Study of conflict: personal, social, institutional, ethnic, and international. Conflict resolution and management also will be addressed. (*)

POLSC 201 International Relations 3(3-0)
Introduction to international relations and world politics. Focuses on global political issues, including conflict, war, political economy, environmental politics and globalization. (F)

POLSC 202 Comparative Politics 3(3-0)
Introduction to comparative political analysis through study of selected political systems. Emphasis on basic political functions and processes in developed countries. (S)

POLSC 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 270 Introduction to Homeland Security 3(3-0)
An overview of homeland security, key threats, challenges and potential responses. (F)

POLSC 271 Terrorism 3(3-0)
An examination of extremist groups and private violence in the context of monitoring, prevention, and responses. (S)

POLSC 272 Critical Incidence Management 3(3-0)
The policies and practices of local first responders, inter-agency relationships, political violence and unconventional weapons. (F)

POLSC 300 Political Parties and Elections 3(3-0)
Examines the organization and function of political parties and the roles of political parties, pressure groups, and public opinion in American elections. Prerequisite: POLSC 101. (F)

POLSC 305 War, Peace, and Globalization 3(3-0)
Study of war, peace, and globalization in international relations. Special emphasis on the theoretical framework for global conflict and the many political dimensions of globalization. Prerequisite: POLSC 101. (S)

POLSC 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 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 Nationalism/Ethnic Conflict 3(3-0)
The course will survey theories of identity formation and study the political origins and consequences of national and ethnic identities in countries around the world. (S/E)

POLSC 445 Inequality and Economic Development 3(3-0)
Analyzes politics in developing countries with an emphasis on how politics and political systems affect economic growth and inequality. (S/O)

POLSC 450 Democracy and Dictatorship 3(3-0)
This course analyzes democratic systems from around the world and explores which democratic systems promote good governance and why others promote corruption or poor governance. (F/O)

POLSC 455 States, Citizens and Human Rights 3(3-0)
Introduces students to the theories, politics and issues involved in building states, promoting human rights and defining citizenship in modern political systems. (F/E)

POLSC 473 American Political Thought 3(3-0)
Development of American segment of modern political thought from colonial times to present. Interrelationship of individuals, ideas and institutions shaping modern American political responses. (*)

POLSC 480 Practicum in Politics and Public Service (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)

UNDERGRADUATE COURSES

PSYCH 100 General Psychology 3(3-0)
Overview of the field of psychology including learning, perception, motivation, emotion, heredity, personality, development, abnormal and psycho-therapy. (F,S,SS)

PSYCH 103 Introductory Psychology for Majors 2(2-0)
Explore psychology as a career in addition to an introduction to the basic skills required for conducting psychological research including APA writing style, journal article analysis, and basic statistics. (F,S,SS/E)

PSYCH 105 (POLSC, SOC, WS 105) Understanding Human Diversity 3(3-0)
Americans live in a complex and diverse society. This course examines the nature, impact and strategies for dealing with diversity in personal and social contexts. (*)

PSYCH 110 Improving Memory 2(2-0)
Practical guide to understanding and improving memory. Emphasis on the application of study techniques for memory improvement. Exercises de-signed to increase memory ability. (*)

PSYCH 151 Human Development 3(3-0)
Survey of human development through life span. A multi-disciplinary 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. (F,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, 209L 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 (1-12 VAR)
In-depth, on-the-job experience in psychology, individually designed. Ability to use psychological tests and counseling techniques recommended. Prerequisite: PSYCH 100, 311, 362, 464, 464L, upper division standing, and written permission of instructor. (F,S,SS) Repeatable (12)

PSYCH 495 Independent Study (1-3 VAR)
Prerequisite: PSYCH 100, upper division standing, and written permission of instructor. (F,S,SS) Repeatable (3)

GRADUATE COURSES

PSYCH 515 Psychology of Minorities 3(3-0)
Designed to provide a systematic analysis of the forces that shape the behavior of minorities and consequent counseling methods with this population. (*)

PSYCH 517 Life Span Development 3(3-0)
Leads to a broad understanding of the impact of external influences on a person through the life span. Format includes exploration of topics of interest, discussion of research and active class participation (*)

PSYCH 524 Philosophy and Theories of Counseling 3(3-0)
Designed to acquaint students with the range of theories currently directing the work of the counselor and to facilitate the development of a personal model of counseling. Personal professional ethics emerge as a major course focus. (*)

PSYCH 525 Tools and Techniques of Guidance Services 3(3-0)
Open to graduate students in the secondary school counseling program. A study of materials and methods used in secondary schools and of the counselor as a consultant and coordinator. The importance and role of the secondary school counselor will be the focus of this class. (*)

PSYCH 526 Organizational Development 3(3-0)
Designed to provide the graduate student with experience and skills necessary to improve programs and organization. (*)

PSYCH 527 Group Counseling 3(3-0)
Leads to an understanding of the function of group methods in the guidance program and assists the student in developing group facilitation skills. (*)

PSYCH 528 Career Development 3(3-0)
Designed to help students gain insight and understanding of the development process of occupational decision. Explores career counseling provided by counselors for clients in the areas of future education and in the world of work. (*)

PSYCH 530 Family Therapy 3(3-0)
This course is an introduction to Family Systems Theory. Emphasis is on the history and development of treatment models in family interventions and techniques. Prerequisite: graduate standing. (*)

PSYCH 536 Practicum 3(3-0)
Designed to provide the beginning counseling student with basic interpersonal training experience. Individual and group contact focuses on personal growth and skill development. (*)

PSYCH 538 Elementary Counseling 3(3-0)
Designed to provide methods and techniques for elementary school counselors. (*)

PSYCH 546 Assessment in Counseling 3(3-0)
This course provides students with an understanding of group and individual educational and psychometric theories and approaches to appraisal. Prerequisite: graduate standing. (*)

PSYCH 563 Psychopathology of Childhood 3(3-0)
Unique conceptual models of etiology, assessment, and therapy appropriate to psychological disorders of child-hood. Graduate students complete an independent project and consider treatment and management techniques. Prerequisite: graduate standing, permission of instructor and PSYCH 362 or equivalent. (*)

PSYCH 591 Special Topics (1-3 VAR)
Prerequisite: graduate standing and permission of instructor. (*)

PSYCH 592 Research 3(3-0)
Designed to assist students with the knowledge and skills necessary for a consumer of research. The fundamentals of research procedure and analysis of statistics are stressed. (*)

PSYCH 595 Independent Study (1-3 VAR)
Prerequisite: graduate standing & permission of instructor. (*)

PSYCH 598 Internship 3(0-3)
Designed to provide the student with actual field work experience in counseling and guidance. (*)

READING (RDG)

UNDERGRADUATE COURSES

RDG 099 Development Reading Skills 3(3-0)
Students will apply strategies for improving comprehension, developing vocabulary, and increasing rate for reading college textbooks. (S/U grading) (F,S)

RDG 310 Current Approaches to Reading and Writing Instruction 3(3-0)
Various approaches to teaching reading and writing including research findings and classroom application of the reading and writing process. Prerequisite: RDG 410 or 435. (F)

RDG 360 Practicum (1-3 VAR)
Work with small groups and individual pupils in the public school preparing materials and lessons under the supervision of a reading teacher. Applies to both elementary and secondary schools depending upon the instructor's assignment. Prerequisite: RDG 410 or 435. (F,S)

RDG 410 Teaching Reading 3(3-0)
Includes reading instruction, emphasizing methods and assessment strategies to meet K-6 Colorado content standards; 30 hours of field experience. Prerequisite: admission to Education. (F,S)

RDG 411 Teaching Elementary Language Arts 2(2-0)
Focuses on language arts instruction for K-6 students; 30 hrs. field work required. Prerequisite: admission to Education. (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 511 Teaching Elementary Language Arts 2(2-0)
Focuses on language arts instruction for K-6 students; 30 hrs. field work required. Prerequisite: admission to Education. (F,S)

RDG 531 Developing Creative Centers 1(1-0)
Students will investigate various types of learning centers and means of successful implementation in the classroom. Development of materials, lesson plans and record-keeping systems which will result in a complete reading center. Investigation into research on effectiveness of learning centers. Prerequisite: graduate standing. (SS)

RDG 535 Content Area Literacy 3(3-0)
Focuses on skills and strategies to improve comprehension of textual material as well as writing in various content areas. Prerequisite: graduate standing. (*)

RDG 536 New Directions in Reading Comprehension 2(2-0)
Current research-based theory and practical classroom strategies and procedures for increasing comprehension of reading in elementary and secondary content area. Emphasis on open-ended, higher-order thinking skills. Prerequisite: graduate standing. (*)

RDG 537 Newspapers as a Teaching Resource 1(1-0)
Strategies and procedures for using the newspaper as a supplementary resource in content area classrooms at all grade levels (K-12). Prerequisite: graduate standing. (SS)

RDG 542 Reading Across Cultures 2(2-0)
Techniques of adapting reading instruction for the linguistically and culturally different child. Prerequisite: graduate standing. (*)

RDG 550 Diagnosis and Remediation of Reading Problems 3(2-3)
Formal and informal diagnostic procedures for the classroom teacher including standardized testing, informal inventories, close, criterion-referenced testing and Reading Miscue Inventory. Prescriptions based on diagnosis; remediation strategies applied by students. Prerequisite: a beginning reading course, graduate standing, and teacher certification or initial testing in basic competencies. (*)

RDG 552 Psycholinguistic Views of Reading: Process to Practice 2(1-3)
Introduction to psycholinguistic perspectives through analysis of oral reading errors. Reading Miscue Manual as an instrument for investigating reader's strengths and weaknesses. Strategies for remediating poor quality miscues. Prerequisite: beginning course in reading, graduate standing, and teacher certification or initial testing in basic competencies. (*)

RDG 560 Practicum 2(0-6)
Work with small groups and individual pupils in the public school preparing materials and lessons under the supervision of a reading teacher. Applied to both elementary and secondary schools depending on the instructor's assignment. Prerequisite: RDG 410 or 435, and graduate standing. (*)

RDG 591 Special Topics (1-2 VAR)
Prerequisite: graduate standing. (*)

RDG 595 Independent Study 1(0-2)
Prerequisite: graduate standing. (*)

RECREATION (REC)

UNDERGRADUATE COURSES

REC 100L Wilderness Technical Skills 1(0-2)
Introduction to wilderness skills paramount for outdoor leadership competence. Students will learn and demonstrate technical skills. (F)

REC 102 Mountain Orientation 2(1-2)
An intensive one-week field experience in the Colorado mountains. Clothing and equipment selection, nutrition and rations planning, back country conservation and sanitation, navigation, and trail techniques. (*)

REC 103 Winter Orientation 2(1-2)
An intensive one-week ski tour experience in the Colorado mountains. Group dynamics, leadership, and expedition behavior. Travels hut to hut with some winter camping. Prerequisite: permission of the instructor. (*)

REC 104 Desert Orientation 2(1-2)
An intensive one-week desert camping and backpacking experience, accompanied by nine lectures in preparation for the trip. Natural and cultural history, desert conservation, group dynamics. (*)

REC 105 Canyon Orientation 2(1-2)
Students will develop proficiency in canyon travel, group camping, and will explore the geology, geography, and ecology of the canyon country. (*)

REC 240 Recreation Program Design 3(3-0)
Rationale supporting and methods of conducting recreation programs in a wide variety of public, private, voluntary and commercial recreation agencies. (F)

REC 249 Challenge Course Leadership 2(2-0)
This course is designed to teach knowledge, skills, and methods necessary to facilitate challenge course programs in a variety of settings for specific client groups. (F,S)

REC 250 Commercial Recreation and Tourism 3(3-0)
Designing for-profit recreation programs and facilities that are linked to tourism. Practical approach to programming in a commercial setting. (F)

REC 270 Outdoor Leadership I 2(1-2)
An introduction to the concepts of outdoor leadership including a field experience focused on the application of theoretical and practical concepts. Additional costs apply. Prerequisite: REC 100L, REC 102. (F)

REC 280 Foundations of Therapeutic Recreation 3(3-0)
Community and clinical recreation services for the mentally retarded, law offenders, psychologically impaired, sensory impaired, physically disabled, disadvantaged or aging. (F)

REC 291 Special Topics (1-5 VAR)
Undergraduate level of study designed to increase understanding in areas not covered by the department. (*) Repeatable

REC 322 Wilderness First Aid 2(2-0)
Course teaches theory, knowledge, and skills needed for basic medical treatment and evacuation in the wilderness. Involves 3 days of medical training, scenarios and testing. (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. (F)

REC 370 Outdoor Leadership II 2(1-2)
A practical application of the concepts and theory introduced in REC 270. Students will be required to plan and lead REC 104. Prerequisite: REC 104, REC 240, and REC 270. (S)

REC 375 Research and Evaluation of Recreation 3(3-0)
Provides an overview of research designs and methodologies using recreation participation data, for needs assessment and program evaluation. Prerequisite: MATH 109 equivalent or higher, EXHP 101 or permission of instructor. (F)

REC 381 Environmental Interpretation 3(3-0)
History, philosophy, and techniques of interpreting our natural and cultural heritage to visitors in natural resource-based parks. Addresses public, private, and non-profit agencies. (*)

REC 388 Outdoor Leadership Practicum (1-3 VAR)
Involves selected practical experiential opportunities in outdoor leadership. Minimum of 50 contact hours per credit hour. Prerequisite: REC 270, REC 370, and permission of instructor. (F,S,SS) Repeatable (3)

REC 389 Community/Commercial Rec Practicum 3(0-3)
Minimum of 150 hours of practical experience in a selected recreation agency. Prerequisite: permission of director of recreation program. Prerequisite: REC 280 and REC 360. (F,S,SS)

REC 483 Sustainable Practices 3(3-0)
Sustainable, long-term strategies for ecological survival and environmental stabilization, discussed from the perspectives of ethics, economics and political processes. Includes community research and service projects. Prerequisite: BIOL 121/121L (*)

REC 484 Outdoor Resources and Management 3(3-0)
Examination of the outdoor recreation experience, the organization of resource-based recreation management and key outdoor recreation policy issues. Prerequisite: EXHP 101, junior or senior standing or permission of instructor. (S)

REC 485 Recreation Facility Design/Management 3(3-0)
Presentation of basic elements of design and management of recreational facilities, taking into account the interaction between natural resources and man-made structures. Prerequisite: EXHP 101, junior or senior level standing or permission of instructor. (*)

REC 489 Internship in Therapeutic Rec 12(0-36)
Supervised experience with approved professionals in select therapeutic recreation settings. Assumes the normal responsibilities as an entry-level professional in therapeutic recreation. Prerequisite: senior standing, completion of all degree requirements, 2.5 GPA in major, and permission of instructor. (F,S,SS)

REC 491 Special Topics (1-5 VAR) (*) Repeatable

REC 493 Seminar 2(2-0)
Advanced in-depth examinations of contemporary issues in leisure/recreation. Includes student-led discussions, in-depth term projects and comprehensive examinations. Interview and resumé preparation are emphasized. Prerequisite: REC 389. (S)

REC 494 Field Experience (1-4 VAR)
Learning experience to be conducted in an actual recreation environment facilitated by an on-site supervisor and an EXHPR supervisor. Prerequisite: approval of the department chair. (S/U grading) (*) Repeatable

REC 495 Independent Study (1-5 VAR) (*) Repeatable

REC 498 Internship (1-12 VAR)
Supervised experience with approved professionals in select recreation settings. Prerequisite: senior standing, completion of all other degree requirements, 2.500 GPA in the major, and departmental chair approval. (F,S,SS)

GRADUATE COURSES

REC 550 Leadership and Ethics 3(3-0)
Advanced study of leadership techniques and styles, leadership theory, group dynamics, and ethical considerations in recreation. Prerequisite: graduate standing or permission of instructor. (S)

REC 560 Outdoor Education 3(3-0)
Advanced study of the concepts and methods of outdoor education and ethics. Students will assess outdoor living skills and ecological concepts using experiential methods. Prerequisite: graduate standing or instructor permission. (F)

REC 569 Outdoor Leadership I 2(1-2)
Concepts of outdoor leadership including field experience focused on the application of theoretical and practical ideas and research. (F)

REC 570 Outdoor Leadership II 2(1-2)
Advanced practicum in outdoor leadership. Includes responsibilities in trip planning, management, evaluation, group facilitation and processing, and natural resource agency relations. Prerequisite: REC 569 and graduate standing or permission from the instructor. (S)

REC 584 Outdoor Resources and Management 3(3-0)
Advanced study of the outdoor recreation experience, the organization of resource-based recreation management and key outdoor recreation policy issues. Prerequisite: graduate standing or permission of instructor. (S)

REC 591 Special Topics (1-5 VAR)
Graduate level of study designed to increase understanding in areas not covered by the department. (*) Repeatable

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. (*)

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)

GRADUATE COURSE

SCI 500 Workshop (1-4 VAR)
Science workshops designed specifically for professional development of science teachers. Workshops are subtitled and no subtitle may be repeated for credit (not for MSANS credit). Prerequisite: graduate standing or permission of instructor. (*) Repeatable

SOCIOLOGY (SOC)

UNDERGRADUATE COURSES

SOC 101 Introduction to Sociology 3(3-0)
The scientific study of patterns and processes of human social relations. (*)

SOC 105 (POLSC, PSYCH, WS 105) Understanding Human Diversity 3(3-0)
Americans live in a complex and diverse society. This course examines the nature, impact and strategies for dealing with diversity in personal and social contexts. (*)

SOC 155 Minority and Ethnic Relations 3(3-0)
Sociological theories, studies, and findings concerning group maintenance and interaction in contemporary society. (*)

SOC 201 Social Problems 3(3-0)
Sociological perspectives applied to an understanding of global and domestic social problem, including the environment, corporate control, economic and political inequalities, health care, and crime. (*)

SOC 203 The Criminal Justice System 3(3-0)
This course examines origin, nature, and utilization of criminal law; policing, court adjudication and sentencing; jails and prisons; community based corrections; criminal justice policy. (*)

SOC 206 (WS 206) Gender and Society 3(3-0)
Examination and evolution of relationships between sex roles, culture, and societal institutions and processes. Includes an analysis of sexual stratification. (*)

SOC 212 (ANTHR 212) The Forensics of Bones 3(3-0)
Familiarize students with the basic procedures used by forensic anthropologists to obtain evidence in criminal investigations. (*)

SOC 231 (PSYCH, WS 231) Marriage and Family Relationships 3(3-0)
Marriage and family from an institutional and relationship perspective; cross-cultural diversity, mate selection, marital dynamics, parenting, divorce, remarriage, emerging patterns. (*)

SOC 250 (ANTHR 250) The Sacred in Culture 3(3-0)
Concepts of the supernatural studied cross-culturally and in particular cultures. Consideration of how religion helps individuals adjust to stress and aging. (*)

SOC 252 (ANTHR 252) Culture and Personality 3(3-0)
Relationship between group processes and personality factors in a cross-cultural perspective. (*)

SOC 291 Special Topics (1-3 VAR) (*) Repeatable

SOC 301 Sociological Methods 3(3-0)
The methods of research and investigation in sociology and the social sciences. Prerequisite: SOC 101. (F,S)

SOC 302 Collective Behavior and Social Movements 3(3-0)
An analysis of elementary forms of spontaneous and unstructured behavior (panics, rumors), and complex forms of more structured group phenomena (riots, social movements.) Prerequisite: SOC 101. (S)

SOC 303 Crime and Deviance 3(3-0)
The nature and causes of crime as well as of behavior defined as socially deviant, including violent, corporate, political crimes; sexual, cultural, political deviance. Prerequisite: SOC 101 and 203. (F)

SOC 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 424 Organized Crime 3(3-0)
This course examines how organized crime is defined and structured, its causes, its historical roots, its different manifestations and control efforts, both domestically and internationally. Prerequisite: SOC 101 and SOC 203. (*)

SOC 426 Violence and Rioting 3(3-0)
An overview of episodes of collective behavior in society focusing on racial violence and prison riots, including examination of causes, history, and control efforts. Prerequisite: SOC 101 and SOC 203. (SS)

SOC 428 (HIST, WS 428) Women & Work 3(3-0)
Examines historical and contemporary issues for women of various economic, social, and ethnic groups, especially in the US; examines gender ideologies about paid, unpaid work. Prerequisite: junior or senior standing or permission of instructor. (*)

SOC 430 Industrial Organizations 3(3-0)
Modern industrial society, emphasis on industry as a type of social 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 African American Studies 3(3-0)
Overview of the historical, political, and socio-cultural experiences of African Americans. (*)

SOCSC 493 Seminar 2(2-0)
Various problems within the realm of social science utilizing an integrated approach. For majors in broad area social science disciplines. (*) Repeatable

SOCSC 591 Special Topics 2(2-0)
Topics identified by subtitles taught. Prerequisite: graduate standing. (*) Repeatable

SOCSC 593 Seminar 2(2-0)
Various problems within the realm of social science, utilizing an integrated approach. For majors in broad area social science disciplines. Prerequisite: graduate standing. (*) Repeatable

SPEECH COMMUNICATION (SPCOM)

UNDERGRADUATE COURSES

SPCOM 103 Speaking and Listening 3(3-0)
Introduces principles of speaking and listening with emphasis on exposition and its application to public speaking. (F,S,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)

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,SS)

SPN 102 Beginning Spanish II 3(3-0)
Continuation of the development of skills in speaking, listening, reading, writing, and cultural understanding. Prerequisite: SPN 101 or departmental placement test. (F,S,SS)

SPN 130 Cultures of the Spanish-Spkg World 3(3-0)
Topics in the history, literatures, and art of selected Spanish-Speaking 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 302-306 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)

UNDERGRADUATE COURSES

SW 100 Introduction to Social Work 3(3-0)
Introduction to the history and philosophy of the social work profession including the knowledge, values, ethics, roles and skills inherent in social work practice. (F,S)

SW 201 Human Behavior and Social Environment 3(3-0)
Focus on the person in environment throughout the life span with an examination of the relationship between biological, psychological, social, spiritual and cultural systems. Prerequisite: 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. (F,S)

SW 210 Statistics for Social Worker 3(3-0)
Introduction to qualitative and quantitative data analysis. Emphasis on descriptive and inferential statistics most utilized in evidence-based social work practice and research. (F,S)

SW 222 Introduction to Social Work Practice 3(2-2)
Application of the foundation of generalist practice skills. Requires 45 clock hours of volunteer work in an approved human service agency. Prerequisite: SW 201. (F,S)

SW 225 Social Work Policies and Procedures 1(1-0)
Provides fundamental knowledge for social work majors. Includes ethics, handbook, and standards. Prerequisite: SW 100, SW 201, SW 202, SW 205, SW 222. (F,S,SS/E)

SW 230 (CS 230) Chicano: Social and Psychological Study 3(3-0)
Social and psychological forces present in the Chicano community. (F)

SW 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-at-risk. 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 integrates knowledge, values, skills, and theory with micro, mezzo, macro generalist social work practice with diverse populations in various agency settings. Prerequisite: acceptance into the Social Work Program; successful completion of all SW courses with the exception of field courses. Corequisite: SW 488. (F,S,SS)

SW 482 Field Seminar II 3(3-0)
Capstone course which integrates knowledge, values, skills, and theory with micro, mezzo, macro generalist social work practice with diverse populations in various agency settings. Prerequisite: SW 481, SW 488. Corequisite: SW 489. (F,S,SS)

SW 488 Field Placement I 5(0-16)
Sixteen clock hours per week Fall, 32 per week Spring or Summer I Block for 224 hours in approved agency supervised by professional social worker. Prerequisite: acceptance into the Social Work Program and field practicum; successful completion of all required SW courses with the exception of field courses. Corequisite: SW 481. (F,S,SS)

SW 489 Field Placement II 5(0-16)
Sixteen clock hours per week Spring, 32 per week Spring or Summer II Block for 224 hours in approved agency supervised by professional social worker. Prerequisite: SW 481, SW 488. Corequisite: SW 482. (F,S,SS)

SW 490 Special Projects (1-5 VAR)
Prerequisite: social work major, prior written permission of instructor of record. (*)

SW 491 Special Topics (1-3 VAR) (*)

SW 492 Research 3(3-0)
Theory and application of continuing social work research designs and methodologies (qualitative and quantitative) utilizing single subject design, needs assessment, and program evaluation. Prerequisite: SW 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 112 Film Appreciation 3(3-0)
The course will address film as a major subject of audio-visual literacy, including a brief introduction to criticism and history of modern film. (*)

TH 370 Creative Dramatics 1(1-0)
Classroom techniques in dramatics for the teacher. (F,SS)

UNIVERSITY STUDIES (US)

UNDERGRADUATE COURSES

US 101 Academic & Career Exploration 1(1-0)
Provides undeclared/declared students who are still deciding on their majors an opportunity to assess their abilities, interests and goals while investigating the University's degree programs. (F)

US 151 Introduction to Academic Life 3(3-0)
To provide an opportunity for students to learn and adopt methods to be successful in college. Critical thinking, writing and time management are emphasized. (F,S)

US 160 Principles of Leadership 3(3-0)
Study of leadership theories and principles. The course emphasizes components of leadership, gender, ethnic diversity in leadership styles, organizational forms, and personal capacity for leadership. Prerequisite: Acceptance into President's Leadership Program. (F)

US 201 Domestic Violence Theories-Family 3(3-0)
Explores five areas within the family system impacted by domestic violence. Victims and perpetrator issues, patterns of relationship abuse, effects on children. (F,S,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 489 Field Placement in Leadership 3(0-3)
A semester-long internship where students take on a supervised leadership role within an organization. Prerequisite: US 160, US 260, and US 360. Corequisite: student must be enrolled in President's Leadership Program. (F,S,SS)

US 491 Special Topics (1-3 VAR)
Special topics are offered to students in areas where regular course offerings are not available. Prerequisite: junior or senior standing and permission of instructor. (*)

WOMEN'S STUDIES (WS)

UNDERGRADUATE COURSES

WS 100 Introduction to Women's Studies 3(3-0)
The course serves two purposes: (1) to train students in feminist perspective-taking, and (2) to introduce them to issues affecting women's lives using an interdisciplinary framework. (*)

WS 105 (POLSC, PSYCH, SOC 105) Understanding Human Diversity 3(3-0)
Americans live in a complex and diverse society. This course examines the nature, impact, and strategies for dealing with diversity in personal and social contexts. (*)

WS 206 (SOC 206) Gender and Society 3(3-0)
Examination and evolution of relationships between sex roles, culture, and societal institutions and processes, including an analysis of sexual stratification. (*)

WS 211 (PSYCH 211) Women and Society 3(3-0)
Statistical overview of the current status of women, followed by examination of theories concerning equality of the sexes. (F)

WS 212 (PSYCH 212) Sexism and Racism in America 3(3-0)
Dynamics of prejudice and discrimination in terms of sex and race; special attention to analysis of strategies for improving relations. (S)

WS 230 (NSG 230) Women, Health and Society 3(3-0)
Introduction to women's health issues and a basic understanding of how women's health has been influenced historically, culturally and by socio-economic factors. (*)

WS 231 (PSYCH, SOC 231) Marriage, Family, and Relationships 3(3-0)
Marriage and family from an institutional and relationship perspective; cross-cultural diversity, mate selection, marital dynamics, parenting, divorce, remarriage, emerging patterns. (F,S,SS)

WS 235 (MCCNM 235) Women and Media 3(3-0)
The historical and cultural implications of the mass media's portrayal of women and the extent of their media participation from colonial to contemporary times. (*)

WS 291 Special Topics (1-3 VAR) (*) Repeatable

WS 301 Theories of Gender 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 341 (CS 341) Chicana Writers 3(3-0)
Survey of Chicana writers from the early 1900s to the present. Along with the literature, aspects of history, sociology and politics will be incorporated. (*)

WS 401 (CS 401) Third World Feminisms 3(3-0)
This course focuses on Third World women's challenging views of global feminism and feminist representations of "other" women. (*)

WS 403 (SOC 403) Human Sexuality and Social Behavior 3(3-0)
Sexuality and sexual conduct from a sociological and social psychological perspective. Prerequisite: junior or senior standing. (*)

WS 407 (SOC 407) Family Violence 3(3-0)
The extent, seriousness, and impact of the major forms of domestic violence. (*).

WS 427 (HIST 427) Women & Gender in European History 3(3-0)
Examines impact of women and ideas about gender on aspects of European history since 1500; and examines impact of historical changes on women and gender. Prerequisite: HIST 103 or permission of instructor. (*)

WS 428 (HIST, SOC 428) Women & Work 3(3-0)
Examines historical and contemporary issues for women of various economic, social, and ethnic groups, especially in the US; examines gender ideologies about paid, unpaid work. Prerequisite: junior or senior standing or permission of instructor. (*)

WS 453 (SOC 453) The Sociology of the Body 3(3-0)
Exploration of what it is like to live through (in/with/as) our female and male bodies. Examination of writings in the field of body studies. Prerequisite: SOC 101. (S)

WS 455 (SOC 455) Hate Crimes 3(3-0)
Examines assumptions about race, gender, sexuality, and others that are used to justify hate crimes; examines common forms, emphasizing causal factors and effects. Prerequisite: SOC 101. (*)

WS 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)

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Michele McKinney	Director of Public Relations and Business and Community Dev.

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ADMINISTRATIVE OFFICES
(Colorado State University-Pueblo)

OFFICE OF THE PRESIDENT

Leon, Julio S., Interim President

Chang, Lin, Director, Institutional Research & Analysis

Dadabhoy, Zav, Dean of Student Affairs

Folda, Joe, Director, Athletics

Macias, Trisha, Executive Assistant to the President

Williams, LaNeeca, Director of AA/EEO and Campus Diversity

Zaletel, Cora, Executive Director of External Affairs

OFFICE OF THE PROVOST

Dorhout, Peter K., 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

Hanks, Sue, Interim Dean, Hasan School of Business

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 Teacher Education, College of Education, Engineering, and Professional Studies

Marshall, Joseph, Assistant Vice President for Enrollment Management

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

Farley, Michael, Interim Vice President for Finance and Administration

Cason, Craig, Associate Vice President for Facilities Management

Garcia, A. Ramón, Director, Auxiliary Services

Nufer, Ken, Director, Human Resources; Disability Resource Officer

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

Dorhout, Peter K. (2011) Provost and Vice President for Academic Affairs; BS, University of Illinois, Urbana-Champaign; Ph.D., University of Wisconsin-Madison

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

Gonzales, Rhonda (1999) Dean, University Library; BA, Colorado College; MSLIS, Simmons College

Hanks, Sue (1994) Interim Dean of Hasan School of Business and Professor of Business Administration; BSE, MSE, Henderson State University; Ed.D., University of Arkansas

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

Leon, Julio S. (2010) Interim President, Colorado State University-Pueblo; BS, Universidad de Santiago de Chile; MBA, University of North Texas; Ph.D., University of Arkansas

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

Sonnema, Roy B. (2000) Dean, College of Humanities and Social Sciences and Professor of Art; BA, Calvin College; MA, California State University Fullerton; Ph.D., University of California at Berkeley

Wofford, Donna (2010) Associate Dean of Nursing, College of Education, Engineering, and Professional Studies; BS, Baylor University; MS, Texas A&M University-Corpus Christi; Ph.D., Texas Woman's University-Houston

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

Arriaga, Ramon (2007) Assistant Volleyball Coach, Athletics

Atencio, Mike (2007) Station Manager, KTSC-FM; BS, Colorado State University-Pueblo

Babcock, Mike (2010) Assistant Football Coach, Athletics; BA, MA, University of California-Los Angeles

Baird, Tanya (2006) Internship Coordinator, Career Center; BA, MNM, Regis University

Barela, Laura (2009) Veterans Education Benefits Coordinator, CSU-Pueblo/CSU Global Campus; BSW, Colorado State University-Pueblo

Barnosky, John (2007) Architect, Colorado License #B-835, Director of Planning/Construction, Facilities/Physical Plant; BA, University of Colorado

Beltran, Christopher P. (2011) Site Coordinator, VA Certifying Official, TRiO Veterans Upward Bound; BA, Colorado State University-Pueblo; MSW, Colorado State University

Benesch, Susan (2001) Human Resources Associate; BSBA, University of Northern Colorado

Borland, Barbara (1994) Program Manager, Continuing Education; BS, Colorado State University-Pueblo; MA, University of Colorado, Colorado Springs

Boughton, Kynna (2009) Financial Aid Counselor, Student Financial Services; BSBA, Colorado State University-Pueblo

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) Transfer Coordinator, Admissions; BS, Fort Hays State University

Capo, Jeremy (2007) Assistant Athletic Director, Athletics; BS, MS, Fort Hays State University

Carney, Ismana (Jeanette) (2010) Director of TRiO Upward Bound; BA, MA, UC Santa Cruz; Ph.D., Pacifica Graduate Institute, Santa Barbara

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

Cassidy, Janet (2009) Head Women's Soccer Coach, Athletics; BA, San Diego State 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

Chavez, Veronica (1989) Assistant Director, TRiO Educational Opportunity Center; BSW, Colorado State University-Pueblo

Choat, Dorothy (2009) Lamar Site Coordinator, TRiO Educational Opportunity Center; AGS, Lamar Community College

Close, Kellie (2009) Student Events Coordinator; Student Activities; BA, Mount Mercy College; M.Ed., Southern Illinois University

Dadabhoy, Zav (2007) Dean of Student Affairs; BA, MA, University of Wisconsin-Milwaukee; Ph.D., University of Colorado at Denver

Damania, Nicky (2007) 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) Chief Operations Officer, CSU-Pueblo Foundation; BS, Rice University

Deulen, Jill (2003) Assistant Librarian; BA, Colorado State University-Pueblo; MLS, Clarion University

Dever, Natalie (2008) Lab Resource Coordinator, Nursing; BSN, University of Iowa

Devine, Katherine (2010) Disability Resource Coordinator, Student Academic Services; BS, Cameron University, MS Southwestern Oklahoma State University

Dillon, Greg (2009) Head Women's Golf Coach, Athletics; BSBA, Colorado State University-Pueblo

Drown, Kip (2005) Head Women's Basketball Coach, Athletics; BS, MS, Southwest Missouri State University

Duncan, Catherine (2010) Graduation Achievement Project Coordinator, Student Academic Services; BA, Old Dominion University; MA, University of Alabama-Birmingham; Ed.S., Florida State University

Duran, Elizabeth (2001) Degree Audit Specialist; Records Office; BS, University of Phoenix

Durham, Tom (2007) Head Men's and Women's Tennis Coach; Athletics

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Farley, Michael M. (2009) Interim Vice President for Finance and Administration; BS, Regis University; MSBA, Colorado State University

Felicia, Tapia (2010) Online Writing Lab (OWL) Coordinator, Student Academic Services; BA, Colorado State University-Pueblo

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

Fendrich, Chris (2011) Budget and Operations Manager, Student Affairs; BS, Bradley University

Ferguson, Gina (2007) Activity Coordinator, First-Year Programs; BA, Colorado College; MS, University of Kansas

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

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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

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Gomez, Anne (2009) Nurse Practitioner, Student Health Services; AA, Cerritos College; BSN, California State University; MSN, University of Colorado Health Science Center

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Gonzales, Robert G. (2011) Operations and Finance Manager, Business Financial Services; BS, Colorado State University-Pueblo; MS, University of Colorado

Gonzales, Felix (1992) Field Coordinator, Social Work; BA, Colorado State University-Pueblo; MSW, Arizona State University

Goodsell, Nicholas (2009) Project Specialist, TRiO Student Support Services; BS, Colorado State University-Pueblo

Grutt, Elizabeth (2006) Advisor, Continuing Education; BS, Colorado State University-Pueblo; MA, University of Colorado at Colorado Springs

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Hibbert, Keli (2002) Writing Room and CHASS GET Coordinator, Student Academic Services; BA, Colorado State University-Pueblo: MA, Colorado State University

Hughes, Hunter (2007) Football Defensive Coordinator, Athletics; MA, Middle Tennessee State University

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King, Emily (2010) Private Scholarship Administrator, CSU-Pueblo Foundation; BA, BA, University of Colorado at Denver

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Koschke, Josh (2009) Head Men's Golf Coach, Athletics; BS, Colorado State University-Pueblo

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Kumm, James (2008) Admissions Counselor, Admissions; BS, Colorado State University-Pueblo

Laino, Heidi (1997) Assistant Director, NSE Coordinator, Center for International Programs; BSBA, MBA, Colorado State University-Pueblo

Leomiti, Donnell (2008) Football Defensive Backs Coach/Recruiting Coordinator, Athletics; BA, University of Colorado

Lopez, Derek (2007) Director, First-Year Programs; BA, Colorado State University-Pueblo; Ph.D., Stanford University

Lucero, Gene (2006) Educational Development Specialist, TRiO Student Support Services; BS, MBA, Colorado State University-Pueblo

Lundahl, Sandra L. (1985) Counseling Manager, Student Financial Services; AAS, BSBA, Colorado State University-Pueblo

Macias, Trisha (2003) Executive Assistant to the President; BA; University of Colorado-Boulder; MBA, Colorado State University-Pueblo

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 University-Fullerton

Martin, Lisa (2005) Group Fitness Coordinator, Student Recreation; BS, Colorado State University-Pueblo

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McKinney, Joseph A. (2008) Academic Improvement Program Coordinator, Student Academic Services; BA, Colorado State University-Pueblo; MA, Colorado State University

Melin, Carl (1985) Associate Director Counseling and Articulation, Admissions; BA, Adams State College; MS, University of Southern California

Mendoza, Pedro (2009) Assistant Baseball Coach, Athletics; BA, California State University-San Bernardino

Micheli, Karen (2001) Program Associate, Teacher Education Program; BS, Barclay College

Milavec, Frank (2004) Student Technology Support Specialist, Information Technology Services; BS, Colorado State University-Pueblo

Miller, Jeff (2009) Web Communications Manager, External Affairs; BA, Columbia College

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

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

Nordholm, Holand (2007) Sites Coordinator, Continuing Education; BSBA, 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

Obregon, Victoria Ann (2011) Site Coordinator, College Assistance Migrant Program; BA, Colorado State University-Pueblo

Pagnotta, Susie (2010) Manager of Gifs and Records, CSU-Pueblo Foundation; BA, Adams State College

Painter, Barbara (2006) Executive Assistant to the Provost; BA, Wayland Baptist University; MSA, Central Michigan University

Paris, Stephanie (2008) Assistant Women's Softball Coach, Athletics; BS, University of Tennessee at Martin; MS, Walden University

Pechek, Lindsay (2007) MBA Coordinator, Hasan School of Business; BS, Northwest Missouri State University

Peralta, David (2009) Academic Advisor, First-Year Programs; BA Colorado State University-Pueblo

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; MS, University of Texas of the Permian Basin

Pfingston, Valerie (1997) Grant Accounting Coordinator, Controller's Department; BSBA, Colorado State University-Pueblo

Potestio, DenaSue (2007) Executive Director of University Development, CSU-Pueblo Foundation; BS, MBA, University of Denver

Rincon, Eric (2004) Pueblo Site Coordinator, TRiO Educational Opportunity Center; BS, Colorado State University-Pueblo

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Rivera, Jamie (2007) Program Assistant, First-Year Programs; AS, Pueblo Community College

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

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Samora, Tracy (2009) Director of Alumni Relations and Annual Fund, Foundations; BS, Colorado State University-Pueblo

Sanchez, Stan (1994) Head Baseball Coach, Athletics; BS, California State University; MA, Azusa Pacific University

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Sandstrom, Anthony (2007) Sports Information Director, Athletics; BA, Colorado State University-Pueblo

Sells, Norma Jean (2010) College Access Advisor, TRiO Educational Opportunity Center; AAS, Pikes Peak Community College; BS, 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

Spivey, Jennifer (2009) Assistant Women's Cross Country/Track & Field Coach, Athletics; BS, MA, Western Carolina University

Stanley, Roy (1994) Head Coach, Men's and Women's Soccer, Athletics; BA, Princeton University; MA, University of Tulsa

Symington, Christopher E. (2009) Assistant Football Coach, Athletics; BA, University of Colorado at Boulder

Thorsten, Greg (2005) Financial Aid Counselor, Student Financial Services; BA, University of Northern Colorado

Trainor, Lacy (2010) Development Assistant, CSU-Pueblo Foundation; BS, Colorado State University

Trujillo-Aranda, Brenda (1996) Director, TRiO 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, TRiO Student Support Services; AA, American Samoa Community College; BA, Chaminade University of Honolulu; MA, San Diego State University; DPA, Golden Gate University

Turner, Jason A. (2009) Director of Environmental Health and Safety; BS, MS, Colorado State University-Pueblo

Uber, Rhonda Park (2008) Director of Residence Life and Housing, Student Affairs; BS, University of Utah; MS, Southern Illinois University

Valles, Ivan G. (2006) Academic Advisor, First-Year Programs; BS, Colorado State University-Pueblo

Van Kampen, Janet (2007) Data Analyst, First-Year Programs; BS, Colorado State University-Pueblo, MA, University of Northern Colorado

Vasquez, Darlene A. (2010) Program Manager, Continuing Education; BA, Arizona State University; MA University of Phoenix

Vega, Theresa (2008) Trinidad Site Coordinator, TRiO Educational Opportunity Center; BA, Colorado State University-Pueblo

Velarde, Katie (2004) Registrar, Records Office; BSBA, MBA, Colorado State University-Pueblo

Vigil, Sheri R. (2007) Assistant Director of Auxiliary Services; BS, MA, Regis University

Villani, Marjorie J. (2009) Associate Dean of Student Affairs; BS, Colorado State University; MS, Western Illinois University

Wade, Nancy (2009) Peterson Air Force Base Site Manager, Continuing Education; AAGS, Pikes Peak Community College; BA, MA, University of Colorado at Colorado Springs

Walda, Kevin (2005) Assistant Director, TRiO Veterans Upward Bound; BS, University of Colorado, Colorado Springs

Wesolowski, Michelle (2009) Fort Carson Site Manager, Continuing Education; BA, Eastern Illinois University; MA, Northwestern State University

Whatley, Nancy (1986) Assistant Director, TRiO Educational Opportunity Center; AS, Otero Junior College

Whitaker, Niki (2006) Associate Director of Athletics; BS, Colorado State University-Pueblo

Wilds, Harvey (2006) Director of Finance/University Controller; BBA, University of New Mexico

Williams, Annie (1994) Director, Center for International Programs; BA, MBA, Colorado State University-Pueblo

Williams, LaNeeca (2008) Director of AA/EEO and Campus Diversity; BS, MS, Indiana State University

Witkowsky, Patty (2009) Student Affairs Program Manager; BA, Occidental College; MA, University of Maryland; PhD., University of Northern Colorado

Wristen, John T. (2007) Head Coach Football, Athletics; BS, Colorado State University-Pueblo; MA, Adams State College

Yang, Sixian (2008) Institutional Research Analyst, Institutional Research and Analysis; BA, Peking University; MBA, Marquette University

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

Zoss, Roxanne (2010) College Access Advisor, TRiO Educational Opportunity Center; BS, Eastern Michigan University; MA Chapman University

RANKED FACULTY

The following individuals were ranked faculty members in the 2011-2012 academic year. The date in parenthesis indicates the initial year of regular appointment to the ranked faculty.

Ahmadian, Ahmad (1985) Professor of Management; BA, Tehran University; MBA, Ph.D., North Texas State University

Allen, Beverly (2009) Assistant Professor of Library Services; MA, University of Missouri-St. Louis; MSLS, University of Illinois at Urbana-Champaign

Aviña, 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

Bedoya-Valencia, Leonardo (2009) Assistant Professor of Engineering; BS, MS, National University of Colombia, Mines School, Medellin; Ph.D., Old Dominion University

Bencini, William K. (2010) Assistant Professor of Automotive Industry Management; AAS, John A. Logan Community College; BA, Monmouth College; MA, Northern Arizona University

Berardi, Gayle K. (1994) Professor of Political Science; BA, MA, University of Colorado at Colorado Springs; Ph.D., University of Colorado

Billington, Peter J. (1989) Professor of Management; BS, Worcester Polytechnic Institute; MBA, Northeastern University; Ph.D., Cornell University

Bonetti, Sandra J. (1991) Professor of Chemistry; BS, Ph.D., Georgia Institute of Technology

Bregar, Justin (2008) Assistant Professor of Mass Communications; BS, Colorado State University-Pueblo; MS, University of Colorado, Denver

Brengarth, Lauren (2010) Assistant Professor of Mass Communications; B.J., MA, Ph.D., University of Missouri

Brennan, Ian (2003) Professor of Marketing; BA, University of Nottingham; MBA, University of Evansville; Ph.D., University of Texas-Arlington

Brett-Green, Barbara (2010) Assistant Professor of Psychology; BA, Rutgers University; MA, Ph.D., University of Colorado at Boulder

Bridgmon, Krista D. (2008) 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

Brumfield, Lana (2009) Assistant Professor of Nursing; BSN, Louisiana State University; MSN, Colorado State University-Pueblo

Calhoun-Stuber, Susan (1994) Assistant Professor and Department Chair of Sociology and Anthropology; BA, Knox College; MA, Ph.D., University of Denver

Caprioglio, Daniel (1993) Professor of Biology; BA, University of California at Los Angeles; Ph.D., North Carolina State University

Caprioglio, Helen M. (1995) Associate Professor of Biology and Department Chair; 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

Checho, Colleen M. (2010) Assistant Professor of Education; BS, University of Florida, MA, Saint Mary's College of California, Ph.D., University of Nevada, Reno

Chi, Jacob (1997) Professor of Music and Conductor of the Symphony; BA, Siena Heights College; MA, School of Music, University of Michigan; Ph.D., Michigan State University

Cho, Joey J. (2008) Assistant Professor of Computer Information Systems; BCE, MCE, Chungbuk National University, Korea; BS, MCS, Ph.D., Utah State University

Clark, Laura (2002) Clinical Instructor of Athletic Training, EXHPR; BS, Pennsylvania State University; MS, University of Arizona

Clark, Roger (2002) Director of Athletic Training Education Program, Department Chair and Associate Professor, EXHPR; BS, University of Illinois; MS, University of Arizona; Ph.D., University of Pittsburgh

Cobián-Klein, Dora Luz (1995) Professor of Spanish; BA, MA, University of California at San Diego; Ph.D., University of California at Riverside

Conrad, Paul (2011) Assistant Professor of History; BA, Stony Brook University; MA, Ph.D., University of Texas at Austin

Conroy, Colleen (2001) Clinical Instructor of Athletic Training, EXHPR; BS, New Mexico State University; MSEd., Northwest Missouri State University

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

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

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

Epps, Kristen (2010) Assistant Professor of History; BA, William Jewell College; MA, The College of William and Mary; Ph.D., University of Kansas

Eriksen, Scott (2005) Professor of Accounting; BS, University of Illinois; MS, Ph.D., University of North Texas

Eskew, Douglas (2008) Assistant Professor of English; BA, MA, Ph.D., University of Texas-Austin

Farrer, Richard (2006) Associate Professor of Chemistry; BS, Aquinas College, Grand Rapids, Michigan; Ph.D., Boston College

Folkestad, William B. (2009) Associate Professor and Department Chair of Art; BA, Central Washington University; MA, Ph.D., University of Washington

Forsyth, Dan W. (1983) Professor of Anthropology; BA, University of California at Los Angeles; MA, University of Chicago; Ph.D., University of California at San Diego

Foust, Carol (2001) Professor 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, DNP, Beth-El College of Nursing and Health Sciences at UCCS

Fraser, Jane (1998) Professor and Department Chair, Engineering; BA, Swarthmore College; MS, Ph.D., University of California at Berkeley

Fronmueller, Julie (2007) Assistant Professor of Library Services; MBA, Boise State University, MLIS, Louisiana State University

Fronmueller, Michael (2007) Professor of Management; MBA, Eastern Washington University; Ph.D., Washington State University

Funk-Neubauer, Darren (2007) 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) Associate Professor of Management; BA, MBA, Baylor University; MS, Purdue University; Ph.D., New Mexico State University

Gomme, Ian (1995) Professor of Sociology; BA, University of Waterloo; B.Ed., Queen's University; M.Ed., University of Toronto; MA, University of Guelph; Ed.D, University of Toronto

Green, Pearl (Penny) (1982) Assistant Professor of Sociology; BA, City College of New York; MA, Ph.D., Southern Illinois University

Hanks, 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) Associate Professor of History; BA, MA, Brigham Young University; MA, 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

Hudock, Sandra (1997) Professor of Library Services; BA, Gordon College; MSLS, University of Kentucky; MA, Colorado State University

Hudson, Mark (2001) Professor of Music; BA, Harding University; MM, Ph.D., University of Florida

Huff, Richard A. (1997) Associate Professor, Computer Information Systems; BS, San Diego State University; MS, North Texas State University; Ph.D., University of North Texas

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

Johnson, Joel W. (2010) Assistant Professor of Political Science; BA, San Jose State University; MA, Ph.D., University of California, San Diego

Joo, Seong-Jong (2009) Associate Professor of Production and Operations Management; BS, Korea Air Force Academy, Seoul, Korea; MBA, Ph.D., Saint Louis University

Joyce, Richard (1995) Associate Professor of Mass Communications; BA, University of Scranton, Pennsylvania; BS, Colorado State University-Pueblo; MA, University of Colorado at Boulder

Kalevela, Sylvester A. (2005) Professor of Civil Engineering Technology and Department Chair; B.Sc.Eng., University of Dar-es-Salaam, Tanzania; MS, Virginia Polytechnic Institute and State University; Ph.D., Arizona State University

Kinney, Chad (2007) Associate Professor of Chemistry; BA, University of California at San Diego; Ph.D., Colorado School of Mines

Khosrowpour, Shahrzad (2008) 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

Langer, Carol L. (2008) Associate Professor of Social Work; BA, Peru State College; MSW, University of Nebraska-Omaha; 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

Liu, Wen (2010) Assistant Professor of Construction Management; MS, University of Florida; Ph.D., University of Florida; LEED AP.

Loats, Carol (1993) Associate Professor of History; BA, College of Wooster; MA, University of Colorado; MA, University of Northern Colorado; Ph.D., University of Colorado

Long, Yuan (Yoanna) (2006) Associate Professor of Computer Information Systems; BS, China University of Geoscience; MS, East China Computer Institute; Ph.D., University of Nebraska-Lincoln

Louisell, James (1989) Professor of Mathematics; BS, Ph.D., University of Minnesota

Lovato, Samuel (2003) Associate Professor of Mass Communications; BS, Colorado State University-Pueblo; MA, University of Northern Colorado

Lundberg, Bruce (1993) Professor of Mathematics; BS, Grand Canyon University; MA, Arizona State University; MA, Fuller Theological Seminary; Ph.D., Colorado State University

Luscombe, Carolyn (2010) Assistant Professor of Biology; BS, BS, Ph.D., University of Melbourne, Australia

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

Malet, David (2009) Assistant Professor of Political Science; BA, BS, Boston University; MA, Georgetown University; Ph.D., George Washington University

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, Ed.D, University of Wyoming

McClaran, Steve (2008) Assistant Professor, EXHPR Department; BS, MA, University of Northern Colorado; MS, Colorado State University; Ph.D., University of Wisconsin

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

Melnykov, Igor (2005) Associate 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

Metchkov, Zahari (2010) Assistant Professor of Music; BM, MM, DMA, Cleveland Institute of Music

Mills, Alan W. (2008) Director of Bands and Assistant Professor of Music; BA, University of Minnesota-Morris; M.M.E., University of Colorado; M.M., University of Arizona, Ph.D., Florida State University

Mincic, Michael A. (2005) Associate Professor of Civil Engineering Technology; BSCET, Colorado State University-Pueblo; 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 University-Pueblo; 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) Associate Professor of Mathematics; BA, Adelphi University; MS, Lehigh University

Norman, Steve (2008) Associate Professor of Management; BS, MBA, University of Colorado-Colorado Springs; Ph.D., University of Nebraska-Lincoln

O'Connor, John K. (2008) Assistant Professor of Philosophy; BA, Middle Tennessee State University; MA, Northern Illinois University; Ph.D., Boston College

Pardue, Karen (2005) Assistant Professor of Library Services; BA, University of Colorado-Colorado Springs; MSLIS, University of Illinois

Pate, Brian D. (2011) Assistant Professor of Chemistry; BS, University of Virginia, Charlottesville; Ph.D., Indiana University, Bloomington

Peters, Caroline (2006) Assistant Professor of Art; BFA, Northern Illinois University; MFA, University of Montana

Peters, Jennifer Shadle (2005) Associate Professor of Music; BM, 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) Associate Professor of Education; BS, University of North Dakota; M.Ed., Ed.D., University of Northern Iowa

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) Professor of History; BA, University of Pennsylvania; MA, Ph.D., University of Wisconsin-Madison

Regassa, Hailu (1989) Professor of Finance; BBA, Haile Selassie University, Ethiopia; MBA, Ph.D., University of Oregon

Reilly-Sandoval, Arlene (2004) Assistant Professor of Social Work; BA, University of Colorado-Colorado Springs; MSW, Colorado State University

Ribadeneira, Alegria (2006) Assistant Professor of Spanish; BA, Fort Lewis College; MA, Ph.D., University of Florida, Gainesville

Richmond, Pam (2009) Assistant Professor of Social Work; BA, Saint Joseph College; MSW, University of Wisconsin-Milwaukee; Ph.D., Ohio State University

Robbe, Cathi J. (2006) Assistant Professor of Automotive Industry Management; BS, Colorado State University-Pueblo; MS, Capella University

Rochester, Christine (2000) Associate Professor Exercise Science, Health Promotion, and Recreation; BS, Indiana University of Pennsylvania; MS, Canisius College; Ed.D., University of Northern Colorado

Rodríguez-Arenas, Flor María (1995) Professor of Spanish; Universidad Pedagógica Nacional, Bogotá, Licenciatura; Instituto Caro y Cuervo, Bogotá, Post graduate Studies; MA, University of Michigan, Ann Arbor; Ph.D., University of Texas at Austin

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

Samaras, Elizabeth (2009) Assistant Professor of Nursing; BFA, University of North Carolina at Chapel Hill; MSN, Yale University

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, Jeff (2006) Associate 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 and Director of Writing; 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

Spates, Kamesha (2009) Assistant Professor of Sociology; BA, Northern Illinois University; MA, Ph.D., Texas A&M 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 Finance; BS, Soochow University; MA, Ph.D., The Claremont Graduate School

Williams, Susan (2009) Assistant Professor of Nursing; BSN, Colorado State University-Pueblo; MSN, Beth-El College of Nursing and Health Sciences at UCCS

Yescavage, Karen (1992) Associate Professor of Psychology; BS, Northwest Missouri State University; MA, Ph.D., University of North Carolina-Greensboro

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

Collie, Gillian (2008) Lecturer of English; BA, University of Washington; BS, University of Iowa; MBA, MA, Colorado State University-Pueblo

Doucet, Lyneen A. (2010) Lecturer of Library Services; BS Loyola University Chicago; MSW, University of Denver; MLS, Emporia 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

Heedt, Dorothy (2009) Lecturer of English; BA, MA, Colorado State University-Pueblo

Johnston, Tatiana (2007) Lecturer of Spanish; BA, MBA, 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

Saphara, Jason (2002) Lecturer of English; BA, Colorado State University-Pueblo; MA, Kansas State University

Smith, Tyrell W. (2009) Lecturer of Automotive Industry Management; BS, Colorado State University-Pueblo

Stroud, Jacqueline (2008) Lecturer of History; BA, Colorado State University-Pueblo; MA, University of Texas at El Paso; Ph.D., Texas Christian University

Sundermann, Isaac (2009) Lecturer of English; BA, University of Nebraska-Lincoln; MA, Colorado State University-Pueblo

Vidmar, Shawn (2008) Lecturer of English; BA, University of Denver; MA, Colorado State University

Watkins, Tamara (1998) Lecturer of Mathematics; BA, Colorado School of Mines; MSANS, Colorado State University-Pueblo

Whited, William Scott (2001) Lecturer of English; BA, University of Iowa; MA, University of California-Irvine; MFA, University of New Orleans

Williams, Susan G. (2009) Assistant Professor of Nursing; BSN, Colorado State University-Pueblo; MSN, University of Colorado-Colorado Springs

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

Turner, Aaron (2005) Artist-in-Residence; Music; BM, Lawrence University; MM, University of North Texas

EMERITUS FACULTY

Abrahamson, Gayle (1985-2008) AA, BA, MAR, MA, Professor Emeritus of Library Services

Aguilar, Kay M. (1964-1999) BS, MA, Ed.D., Professor Emerita of Exercise Science and Health Promotion

Aichele, Ronald G. (1972-2006) BA, MA, Ph.D., Professor Emeritus of Philosophy

Allen, Ernest E., (1963-2002) BS, MA, MATM, Ed.D., Dean Emeritus of the College of Science and Mathematics and Professor Emeritus of Mathematics

Anderson, Deyrol E. (1983-2002) BA, MA, Ph.D., Professor Emeritus of Mass Communications

Anderson, Norris D. (1965-1984) BA, MA, Ed.D., Professor Emeritus of Education

Askwig, William J. (1962-1994) BSBA, MBA, Ph.D., Professor Emeritus of Economics

Baldauf, Boyd J. (1964-1988) BS, MA, Ed.D., Professor Emeritus of Computer Science Technology

Banks, Jessie (1966-1996) BS, MA, Professor Emeritus of Human Performance and Leisure Studies

Barber, Margaret (1995-2009) BA, MA, Ph.D., Professor Emerita of English

Bartlett, Thomas J. (1967-1977) BS, MA, Professor Emeritus of Mathematics

Bassein, Beth Ann (1966-1991) BA, MA, Ph.D., Professor Emerita of Speech Communication

Benton, Johnny (1968-1996) BA, MA, Ph.D., Professor Emeritus of Speech Communication

Blandford, Robert D. (1965-1989) BS, MA, DA, Professor Emeritus of Mathematics

Borton, John M. (1983-2009) BA, MS, Ph.D., Professor Emeritus of Computer Information Systems

Bory, Rosanne (1984-2008) BA, MA, MA, Professor Emerita of Library Services

Bottini, Patrick W. (1968-1999) BS, MA, Professor Emeritus of Industrial Science and Technology

Bradley, Lawrence B. (1966-1988) BA, MA, Professor Emeritus of Speech Communication/Theater

Brassill, Joann A. (1967-1987) BA, MA, MFA, Professor Emerita of Art

Bright, Leon A. (1963-1995) BS, MA, Ph.D., Professor Emeritus of Foreign Language

Browne, James H. (1991-2007) AA, BA, MA, Ph.D., Professor Emeritus of Management

Cain, Robert L. (1970-1993) BA, MLS, Professor Emeritus of Library Services

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

Duncan, James L. (1958-2009) BM, MM, Professor Emeritus of Music

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

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